

Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14034 METAMITRON (ADAMA, BAYER)

\* CARROT (01AB=ROOT VEGETABLES SUBGROUPS)

**UNDER EVALUATION** 

**Reasons for need:** 

Pigweeds, lambsquarters, other weeds. Pigweeds in NYS and other locations have confirmed resistance to linuron, a key herbicide. Herbicides for use in carrots are limited:06/25;

REQ STATES

NY

NorthEast Region

NorthCentral Region

Southern Region

Western Region

**Reduced Risk** 

#### **PCR Use Pattern:**

Make 3 broadcast applications of metamitron at 1.03 lb ai/a. The first shall be made preemergence (PRE) after seeding but prior to crop emergence, while the second and third shall be 7-10 days apart, beginning when weeds are in cotyledon stage. Alternatively, the PRE application may be 1.25 lb ai/a followed by postemergence applications of 0.94 lb ai/a. A total postemergence program is also allowed; three applications at 1.03 lb ai/a, 7-10 days apart, beginning when weeds are cotyledon stage. Registrant advice is needed on appropriate adjuvant(s) for postemergence applications.

### **HQ Comments:**

EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 NY) Carrot production faces significant challenges from pigweeds, lambsquarters, and other problematic weed species. Of particular concern is the increasing resistance of pigweeds to linuron, a key herbicide currently used in carrot production. Herbicide options for carrots are already limited, making this resistance issue critical. Research is warranted to evaluate the crop safety of metamitron in carrots, determine optimal application timing, and assess its efficacy against linuron-resistant and other problematic weed species. This work is essential to support sustainable weed management and maintain carrot crop productivity.;(2025 NJ) Herbicide options for this crop are limited, with few products currently labeled for use. Weed management is particularly challenging in regions such as the Mid-Atlantic, where herbicide-resistant populations of horseweed (Conyza canadensis) and pigweed (Amaranthus spp.) exert significant pressure. Resistance to linuron has been confirmed for both species in New Jersey. This active ingredient demonstrates high efficacy against these problematic weeds, including populations resistant to both PSII and acetolactate synthase (ALS)-inhibiting herbicides.:

#### **IPM Comments from PCR:**

Per Requester: Very Good Fit; There is a growing need to investigate the potential of metamitron herbicide for use in carrot production, particularly in light of increasing pigweed resistance to linuron, a key herbicide currently used in the crop. Metamitron shares structural similarities with metribuzin, which is labeled for postemergence use in carrots after the crop has developed 5 to 6 true leaves. Further research is warranted to evaluate crop safety, application timing, and efficacy against problematic weed species:06/25;

#### **IPM Comments from Nomination Process:**

; Good Fit: Alternative chemistries can reduce the selective pressure placed on linuron. : Lynn Sosnoskie; Very Good Fit: Excellent crop safety on red beets grown on New Jersey sandy soils was demonstrated in 2024 field trials. However, additional research is needed to confirm crop safety on carrot under these edaphic conditions, as carrots exhibit greater sensitivity to herbicide injury during early developmental stages and may respond differently to soil-applied herbicides due to their distinct root morphology and slower initial growth rate compared to beets. The limited availability of effective postemergence (POST) herbicide options for carrots necessitates heavy reliance on preemergence (PRE) applications for weed suppression during the critical crop establishment phase. This dependence on PRE herbicides is particularly important because: (1) carrots are slow to establish canopy cover, providing extended opportunities for weed competition; (2) mechanical cultivation options are restricted due to the crop's shallow root system and potential for root damage; (3) hand weeding is labor-intensive and economically prohibitive for commercial production; and (4) early-season weed competition can significantly reduce both yield and root quality, making prevention through effective PRE control essential for maintaining crop value.: Thierry Besancon



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PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

14046 CLETHODIM (ADAMA, UPL NA, VALENT)

\* CARROT (SEED CROP) (01AB=ROOT VEGETABLES SUBGROUPS)

**UNDER EVALUATION** 

Reasons for need:

Various weedy grasses including rattail fescue, Vulpia myuros. Recent changes to label wording explicitly disallow use on seed crops, when before advisory wording was used on the label. There is no specific use directions for carrot seed. Clethodim was previously used on many carrot seed acres in Oregon, without it, weed control will suffer and seed quality reduced:06/25:

REQ STATES OR

quality reduced.0

NorthCentral Region

**Southern Region** 

**Western Region** 

Α

Reduced Risk

### **PCR Use Pattern:**

**NorthEast Region** 

Make up to four foliar broadcast applications of Select Max at 9 to 16 fl oz/a, at least 14 days apart and no closer than 30 days before harvesting for seed. See label for adjuvant guidance. Do not apply more than 64 fl oz/year.

## **HQ Comments:**

Key Export Market: "40% of world supply". This use is labeled for carrots grown for roots. EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Good Fit; Clethodim plays a significant role in the existing integrated weed management plans for carrot seed production in Oregon. It effectively manages difficult to control weedy grasses and would prevent dominant weed population shifts of taking over fields when used in conjunction with other management options:06/25;

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14033 METAMITRON (ADAMA, BAYER)

BEET (GARDEN) (01AB=ROOT VEGETABLES SUBGROUPS)

**UNDER EVALUATION** 

**Reasons for need:** 

WEEDS. Pigweed species (AMAXX), common lambsquarters (CHEAL), other weed species. CHEAL needs PRE control options, AMAPA control demonstrated in sugar beet. There are few beet herbicides, they have narrow

REQ STATES NY

spectrums of control, and are often used at low rates, which can limit performance:06/25;

NorthEast Region

A NorthCentral Region

**Southern Region** 

Western Region

Reduced Risk

### **PCR Use Pattern:**

After reviewing the Goltix label from the United Kingdom and discussing with requester, IR-4 suggests the following: Make 3 broadcast applications of metamitron at 1.03 lb ai/a. The first shall be made preemergence (PRE) after seeding but prior to crop emergence, while the second and third shall be 7-10 days apart, beginning when weeds are in cotyledon stage. Alternatively, the PRE application may be 1.25 lb ai/a followed by postemergence applications of 0.94 lb ai/a. A total postemergence program is also allowed; three applications at 1.03 lb ai/a, 7-10 days apart, beginning when weeds are cotyledon stage. Registrant advice is needed on appropriate adjuvant(s) for postemergence applications.

## **HQ Comments:**

XH198 dmp only was converted to this new pr# 14033. Metamitron 24c labels exist for preemergence use in sugarbeets in parts of CO, ID, NE, OR and WY; EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 MD) see requestor comment; (2025 NY) This herbicide is registered for use in beet crops (sugar, table, forage) in other countries (such as NZ) where the performance is well known. It has also received emergency registrations for use in US sugar beets (for pigweed management). NY and NJ trials (red beets) have also demonstrated efficacy and safety. Herbicides are limited in red beets and all currently available products have narrow spectrums of control. This active ingredient is a critically needed tool for both PRE and POST weed management.; (2025 NJ) This herbicide is registered for use in table beet in Europe and New Zealand, where it has demonstrated excellent crop safety. A 2024 field trial in New Jersey evaluated a formulation containing metamitron and ethofumesate (Torero) on table beet at 1X and 2X application rates. When applied preemergence on loamy sandy soil, the treatment showed excellent crop safety and no yield reduction compared to the standard cycloate treatment (Up-beet).

Weed control efficacy was =90% for multiple problematic species, including common lambsquarters (Chenopodium album), oakleaf goosefoot (C. glaucum), redroot pigweed (Amaranthus retroflexus), common purslane (Portulaca oleracea), hairy galinsoga (Galinsoga quadriradiata), carpetweed (Mollugo verticillata), and Polygonum species.

Postemergence applications also demonstrated excellent crop safety when applied at the 2- to 4-leaf crop stage to weeds shorter than 4 inches. Additionally, this herbicide has received Section 18 emergency use authorizations for sugar beet production in the United States, further supporting its safety profile in beet crops.;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; This is an exceptionally good fit for beets. There are few beet herbicides, they have narrow spectrums of control, and are often used at low rates, which can limit performance. Preliminary data from NY and NY demonstrate weed control and crop safety when used PRE (0.70-2.30 kg ai/ha, 0.62-2.05 lb ai/A) and POST (0.70 kg ai/ha, 0.62 lb ai/A) as a pre-mix with ethofumesate. The use of metamitron could provide effective and safe weed control in beets, which may reduce the number of sprays required during the season:06/25

### **IPM Comments from Nomination Process:**



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different across herbicide treatments.

; Very Good Fit: see requestor comment: Megan James Hickman; Very Good Fit: 1) adds a new active ingredient to the toolbox, which relieves selective pressure on currently labeled a.i.s., 2) metamitron provides PRE and POST activity and can strengthen early season weed suppression (allowing beets to gain a competitive edge), 3) PRE and POST use allows for tank-mixing and diversifies sequential application programs 4) metamitron is effective against a broad range of species, which may help reduce the number of applications that would normally be made when using other chemistries.: Lynn Sosnoskie; Very Good Fit: Excellent crop safety on red beets grown on New Jersey sandy soils was demonstrated in 2024 field trials. The limited availability of effective postemergence (POST) herbicide options for beets necessitates heavy reliance on preemergence (PRE) applications for weed suppression during the critical crop establishment phase. This dependence on PRE herbicides is particularly important because: (1) beets are slow to establish canopy cover, providing extended opportunities for weed competition; (2) mechanical cultivation options are restricted due to the crop's potential for root damage; (3) hand weeding is labor-intensive and economically prohibitive for commercial production; (4) early-season weed competition can significantly reduce both yield and root quality, making prevention through effective PRE control essential for maintaining crop value; and (5) metamitron provides broad-spectrum weed control against species problematic in beet production, potentially reducing the need for multiple POST applications with currently registered herbicides.

: Thierry Besancon						
	Brandenberger, L.	P04-OK-DMP	RECD	NONE	-	1.4 AND 4.3 LB AI/A POST; RELATIVELY SAFE, EQUAL TO PHENMEDIPHAM; GENERALLY EQUAL CONTROL OF WEEDS (PIGWEED, GOOSEGRASS, CARPETWEED AND HENBIT)
	Brandenberger, L.	P04-OK-DMP	RECD	NONE	-	11.4 LB AI/A PRE; RELATIVELY SAFE, EQUAL TO PYRAZON; EQUAL CONTROL OF WEEDS (PIGWEED, GOOSEGRASS, CARPETWEED AND HENBIT), LOWER YIELD.
	Sosnoskie, Lynn	P23-NY-DMP	RECD	NONE		Metamitron (as a component of Terero) was PRE and/or POST to 'Ruby Queen' beets growing in a Honeoye loam. Metamitron was applied PRE at 1.46, 2.2, or 2.92 lb ai/a with and without s-metolachlor. Each metamitron PRE treatment was followed with a postemergence grower standard. Sequential metamitron treatments included 1.0 lb ai/a applied PRE with or without s-metolachlor followed by metamitron POST at 1.0 lb ai/a. Metamitron POST did not injure beets. Stunting from metamitron applied PRE without s-metolachlor ranged from 0 to 19% three weeks after planting (WAP). The addition of s-metolachlor with the two lower rates of metamitron significantly increased crop injury 3WAP, but was still only 16% or less. All herbicide treatments provided excellent levels of weed cover reduction and yields were generally equal across herbicide treatments.
	Besancon, Thierry	P24-NJ-DMP	RECD	NONE	- — —	Metamitron (as a component of Terero) was PRE and/or POST to 'Ruby Queen' beets growing in a Honeoye loam. Metamitron was applied PRE at 1.46, 2.2, or 2.92 lb ai/a with and without s-metolachlor. Each metamitron PRE treatment was followed with a postemergence grower standard. Sequential metamitron treatments included 1.0 lb ai/a applied PRE with or without s-metolachlor followed by metamitron POST at 1.0 lb ai/a. Metamitron POST did not injure beets. Stunting from metamitron applied PRE without s-metolachlor ranged from 0 to 9% three weeks after planting (WAP). The addition of s-metolachlor with the higher rates of metamitron significantly increased crop injury 3WAP to 24 and 28%. All herbicide treatments provided excellent levels of weed cover reduction and yields were not statistically



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PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13978 METAMITRON (ADAMA, BAYER)

BEET (GARDEN) (SEED CROP) (01AB=ROOT VEGETABLES SUBGROUPS)

UNDER EVALUATION

Reasons for need:

Effective control of several broadleaf species including Palmer amaranth, waterhemp, common lambsquarters, and pigweeds. Beet seed producers have few available herbicide options to use for broadleaf weed control:06/25; NY: Effective weed control is needed in beet seed production (both hybrd and open-pollinated varieties) to ensure sufficient and vigorous stock needed for fresh and processing beet production):06/25;

**REQ STATES** OR NY

NorthEast Region

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NorthCentral Region

**Southern Region** 

Western Region

Α

Reduced Risk

### **PCR Use Pattern:**

Make one application of Goltix 700 SC at 4 pt/a after seeding beets and before the crop emerges.

### **HQ Comments:**

Key Export Markets: Japan, South Korea, EU, Phillipines, Taiwan; Crop updated from Beet (Sugar) (Seed Crop) to Beet (Garden) (Seed Crop):06/25/sb; EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 CA) same;(2025 MD) see previous comments;(2025 NY) This herbicide is registered for use in beet crops (sugar, table, forage) in other countries (such as NZ) where the performance is well known. It has also received emergency registrations for use in US sugar beets (for pigweed management). NY and NJ trials (red beets) have also demonstrated efficacy and safety. Herbicides are limited in red beets and all currently available products have narrow spectrums of control. This active ingredient is a critically needed tool for both PRE and POST weed management. Effective weed control is needed in beet seed production (both hybrd and open-pollinated varieties) to ensure sufficient and vigorous stock needed for fresh and processing beet production);(2025 NJ) European and New Zealand registrations for table beet production have established metamitron's strong crop safety profile through extensive commercial use. New Jersey field research conducted in 2024 tested a metamitron-ethofumesate formulation (Torero) on table beets using standard (1X) and double (2X) application rates. Pre-emergence applications on loamy sandy soils exhibited outstanding crop tolerance with no observable yield penalties relative to the cycloate standard treatment (Up-beet). The treatment achieved =90% control effectiveness against several challenging weed species: common lambsquarters, oakleaf goosefoot, redroot pigweed, common purslane, hairy galinsoga, carpetweed, and various Polygonum species. Post-emergence treatments maintained excellent crop selectivity when applied to 2- to 4-leaf stage beets targeting weeds under 4 inches in height. The herbicide's safety credentials are further validated by Section 18 emergency use authorizations granted for U.S. sugar beet production, providing additional evidence of its compatibility with beet crop systems.

### **IPM Comments from PCR:**

Per Requester: Good Fit; Metamitron would give an additional tool for broadleaf weed control in beet seed production of western Oregon and western Washington. Current available tools are older chemistries that may be unavailable in the near future and new options should be explored:06/25;

### **IPM Comments from Nomination Process:**



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; Very Good Fit: same: Kari Arnold; Good Fit: see previous comments: Megan James Hickman; Very Good Fit: 1) adds a new active ingredient to the toolbox, which relieves selective pressure on currently labeled a.i.s., 2) metamitron provides PRE and POST activity and can strengthen early season weed suppression (allowing beets to gain a competitive edge), 3) PRE and POST use allows for tank-mixing and diversifies sequential application programs 4) metamitron is effective against a broad range of species, which may help reduce the number of applications that would normally be made when using other chemistries. Effective weed control is needed in beet seed production (both hybrd and open-pollinated varieties) to ensure sufficient and vigorous stock needed for fresh and processing beet production): Lynn Sosnoskie; Very Good Fit: Excellent crop safety on red beets grown on New Jersey sandy soils was demonstrated in 2024 field trials. The limited availability of effective postemergence (POST) herbicide options for beets necessitates heavy reliance on preemergence (PRE) applications for weed suppression during the critical crop establishment phase. This dependence on PRE herbicides is particularly important because: (1) beets are slow to establish canopy cover, providing extended opportunities for weed competition; (2) mechanical cultivation options are restricted due to the crop's potential for root damage; (3) hand weeding is labor-intensive and economically prohibitive for commercial production; (4) early-season weed competition can significantly reduce both yield and root quality, making prevention through effective PRE control essential for maintaining crop value; and (5) metamitron provides broad-spectrum weed control against species problematic in beet production, potentially reducing the need for multiple POST applications with currently registered herbicides.: Thierry Besancon



Weed Science Date: 9/2/2025

PR#

**CHEMICAL (MFG)** 

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13114 \*

PENDIMETHALIN (BASF, UPL NA)

CELERIAC (01AB=ROOT VEGETABLES SUBGROUPS)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

**Reasons for need:** 

SMALL SEEDED ANNUAL BROADLEAVES AND GRASSES; THERE ARE ONLY TWO OTHER PREEMERGENCE HERBICIDES (PROMETRYN AND LINURON)

**REQ STATES** 

MI

NorthEast Region

NorthCentral Region

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**Southern Region** 

Western Region

Reduced Risk

### PCR Use Pattern:

USE THE PROWL PRODUCT; MAKE ONE SOIL APPLIC OF 0.95-1.9 LB AI/A, PREEMERGENCE AFTER TRANSPLANTING; 60-DAY PHI

### **HQ** Comments:

NO KEY EXPORT MARKETS NOTED; THERE ARE EXISTING TOLERANCES FOR TURNIP GREENS AND CARROT, IN CROP GROUP 1, BUT THESE TOLERANCES ARE NOT LIKELY USABLE FOR EXTRAPOLATION TO CELERIAC:08/20; EPA GREEN:08/21, 08/22; "UPL will follow BASF decision on this project 05/23 JPB;; EPA GREEN: 08/23

### Efficacy/Crop Safety (E/CS) Data Required:

DATA FROM AT LEAST 2X RATE BEFORE DECIDING ON STATUS CHANGE: 07/22

### **Nomination Justification:**

(2020 MI) SMALL SEEDED ANNUAL BROADLEAVES AND GRASSES; THERE ARE ONLY TWO OTHER PREEMERGENCE HERBICIDES (PROMETRYN AND LINURON); (2021 MI) SMALL SEEDED ANNUAL BROADLEAVES AND GRASSES; THERE ARE ONLY TWO OTHER PREEMERGENCE HERBICIDES (PROMETRYN AND LINURON); (2022 MI) same; (2023 MI) See Prey; (2024 MI) See Prey; (2025 MI) See Prey;

### **IPM Comments from PCR:**

PER REQUESTER: VERY GOOD IPM FIT; YES, COMPATIBLE WITH CROP ROTATION AND NUTRIENT AND IRRIGATION MANAGEMENT; NEW MECHANISM OF ACTION FOR THIS CROP FOR WEED MANAGEMENT; RELATIVELY NON-TOXIC TO BENEFICIALS; APPLIC TIMING COMPATIBLE WITH PEST MONITORING:08/20; VERY GOOD FIT: SEE PREV: NCR

Chaudhari, Dr. Sushila

P20-MI-DMP

RECD

PROWL AT 1.9 LB AI/A POST-TP; GOOD CROP TOLERANCE; YIELD COMPARABLE TO PROMETRYN.



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

12866 \*

METRIBUZIN (ADAMA, UPL NA)

SWEET POTATO (01CD=TUBEROUS AND CORM VEGETABLES SUBGROUPS)

NEED E/CS DATA ONLY

Reasons for need: TO CONTROL WEEDS; ONLY ONE HERBICIDE (DEVRINOL) IS REGISTERED IN SWEETPOTATO PLANT BEDS

**REQ STATES** 

NC CA MS

NorthEast Region

В

**NorthCentral Region** 

**Southern Region** 

Α

**Western Region** 

**Reduced Risk** 

### **PCR Use Pattern:**

MAKE ONE PREEMERGENCE APPLIC OF 5.6 OZ/A, APPLIED AFTER PLANTING STORAGE ROOTS AND COVERING WITH SOIL AND PLASTIC

### **HQ Comments:**

EUROPE NOTED AS A KEY EXPORT MARKET (SEE ALSO PR# 12095, WHICH IS COVERED BY 10671 - COULD THIS REQUESTED USE PATTERN ALSO BE COVERED?):08/19; THE POTATO PR# 10671 STUDY (AND THE CROP SUBGROUP 1C TOLERANCE THAT WAS EXPECTED) THAT WAS TO COVER THIS PLANTING BED USE PATTERN ON SWEET POTATO IS BEING CANCELED DUE TO ANALYTICAL ISSUES THAT CAN'T BE RESOLVED; A NEW PR# WILL BE CREATED FOR THAT REQUESTED USE ON POTATO, AND THE STATUS OF THIS REQUESTED USE IN SWEET POTATO BEDS IS CHANGED FROM UNDER EVALUATION TO RESEARCHABLE SO IT CAN BE PRIORITIZED:05/20; EPA HOLD:08/20; EPA REMOVED HOLD 2/23 & ADAMA NOW REQUESTS RESIDUE & E/CS:03/23/sb; YELLOW 08/23; ADAMA requested status update from Researchable, Residue & E/CS Data Needed to Tol Estab; need E/CS to add crop/pest to label:05/24/sb; status updated to Needs E/CS data only and potato residue data is being generated under PR 13027, and a crop group tolerance using the potato data will cover this commodity:04/25/sb;

### Nomination Justification:

(2019 FL) ONLY ONE HERBICIDE (DEVRINOL) IS REGISTERED IN SWEETPOTATO PLANT BEDS; Efficacy data by K. Jennings (NC) demonstrating good control is available.;(2023 FL) See previous comments.;(2024 FL) See previous comments.;(2025 NJ) Currently, no ALS-inhibiting herbicides (WSSA group 2) are labeled for use on sweet potato. Expanding the number of modes of action available for this crop would significantly enhance management strategies of herbicide resistant weeds.;

### **IPM Comments from PCR:**

PER REQUESTER: VERY GOOD IPM FIT; GOOD EFFICACY AGAINST TARGET PESTS:08/19; VERY GOOD FIT: SEE PREV COMMENTS.: SOR

### **IPM Comments from Nomination Process:**

; Very Good Fit: See previous comments.: Kristen Searer-Jones; Very Good Fit: The addition of metribuzin to sweet potato weed management systems provides an additional mode of action that will help manage and mitigate herbicide resistance. This approach perfectly aligns with integrated weed management strategies by reducing reliance on a single mode of action.: Thierry Besancon

Smith, Stephen C

P17-NC-DMP

RECD

NONE

FIELD AND GREENHOUSE STUDIES IN 2016 AND 2017.  $0.0.26\,\mathrm{LB}$  Al/A PRE APPLIED TO PROPAGATION BEDS; NO INJURY TO SWEETPOTATO SLIPS.



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PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

13380 \*

SULFENTRAZONE (FMC)

SWEET POTATO (01CD=TUBEROUS AND CORM VEGETABLES SUBGROUPS)

TOL EST; NEED E/CS DATA TO ADD CROP/PEST

**REQ STATES** 

Reasons for need:

CURRENTLY THE LABEL DOES NOT ALLOW FOR ROTATING TO SWEET POTATO THE FOLLOWING SEASON; BEING ABLE TO USE SULFENTRAZONE IN ROTATIONAL CROPS WILL ALLOW FOR A MORE DIVERSE HERBICIDE ROTATION OVER A 2-YR PERIOD; IT WILL ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SWEET POTATO AND IMPROVE OVERALL CONTROL; NJ/Sulfentrazone is one the few herbicides that can provide control of yellow nutsedge which remains a major issue in sweet potato:09/23

**NorthEast Region** 

Α

**NorthCentral Region** 

**Southern Region** 

**Western Region** 

**Reduced Risk** 

DE AR MS NJ

### **PCR Use Pattern:**

SPARTAN 4L, NUMEROUS FORMULATIONS, AT 6-12 FL OZ, SOIL APPLIED FOR SOYBEAN WITH 1 APPLIC; APPLY WITH THE EXISTING LABEL REQUIREMENTS; MAY NOT BE COMPATIBLE WITH LATE PLANTED SOYBEAN

## **HQ Comments:**

EPA GREEN 08/22

### **Nomination Justification:**

(2022 MD) see database comments.;(2022 FL) See previous comments.;(2023 MD) could likely include other crops requested in the protocol;(2023 FL) See previous comments.;(2024 FL) See previous comments.;(2024 MD) see previous;(2025 MD) see previous comments;

### **IPM Comments from PCR:**

PER REQUESTER, A VERY GOOD FIT; ALLOWS FOR A MORE DIVERSE HERBICIDE ROTATION OVER 2-YR PERIOD; IS EFFECTIVE ON AMARANTHUS SPECIES TO ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SWEET POTATO AND IMPROVE OVERALL WEED CONTROL; VERY GOOD FIT: SEE PREV COMMENTS: NER; VERY GOOD FIT: SEE PREV COMMENTS.: SOR; VGF-SOR & NER:08/24;

### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13508 \*

SULFENTRAZONE (FMC)

SWEET POTATO (01CD=TUBEROUS AND CORM VEGETABLES SUBGROUPS)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

PERENNIAL NUTSEDGE SPECIES; YELLOW NUTSEDGE IS THE SECOND MOST TROUBLESOME WEED BEHIND PALMER AMARANTH AND THIRD MOST COMMON WEED IN NORTH CAROLINA SWEETPOTATO BEHIND PALMER AMARANTH AND CARPETWEED. S-METOLACHLOR IS THE ONLY HERBICIDE REGISTERED FOR CONTROL AND IT DOES NOT PROVIDE ADEQUATE CONTROL. HALOSULFURON AND EPTC WERE PREVIOUSLY REGISTERED FOR USE IN SWEETPOTATO BUT THEY ARE NO LONGER REGISTERED:

**REQ STATES** NC NJ KY AR MS

NorthEast Region

Α

**NorthCentral Region** 

**Southern Region** 

Α

Western Region

**Reduced Risk** 

### PCR Use Pattern:

SPARTAN; DOSAGE 2.25 OZ/A, 1 APPLICATION PREEMERGENCE TO THE WEED APPLIED OR POST EMERGENCE OVER THE TOP OF THE CROP AFTER TRANSPLANTING **HQ Comments:** 

NEED E/CS VALIDATION FROM SEVERAL TRIALS BEFORE RESIDUE WORK CAN BEGIN

### **Nomination Justification:**

(2022 FL) See requestor comments.;(2022 MD) see database comments;(2023 MD) See previous comments.;(2023 FL) See previous comments.;(2024 FL) See previous comments.;(2024 FL) See previous comments.;(2025 MD) see previous;(2025 FL) See previous comments.;(2025 MD) see previous comments.;(2025 MD) Currently, no PPO-inhibiting herbicides (WSSA Group 14) are labeled for use on sweet potato production. This gap limits growers' options for managing herbicide-resistant broadleaf weeds, particularly pigweed species that have developed resistance to existing herbicide programs. Expanding the available modes of action would significantly strengthen herbicide resistance management by providing alternative control mechanisms and enabling effective rotation sequences. The addition of Group 14 chemistry would offer sweet potato growers a valuable tool for controlling resistant weed populations while reducing overreliance on currently available herbicides.;

### **IPM Comments from PCR:**

PER REQUESTER: VERY GOOD FIT; SULFENTRAZONE PREPLANT AFTER BED FORMATION COULD BE APPLIED IN FIELDS WITH KNOWN NUTSEDGE POPULATIONS. EVEN WITH AS FEW AS 15 YELLOW NUTSEDGE PLANTS PER SQUARE YARD TWO WEEKS AFTER SWEETPOTATO TRANSPLANTING, PREDICTED MARKETABLE YIELD LOSS IS AS MUCH AS 35 PERCENT LESS THAN WEED-FREE SWEETPOTATO:08/22; VERY GOOD FIT: SEE PREV COMMENTS: NER; VERY GOOD FIT: SEE PREV COMMENTS.: SOR; VGF-SOR & NER:08/24:

#### **IPM Comments from Nomination Process:**

; Very Good Fit: See previous comments.: Kristen Searer-Jones; Very Good Fit: see previous comments: Megan James Hickman; Very Good Fit: Adding a new MOA to the sweet potato herbicide toolbox is especially critical for sweet potato production, which has fewer labeled herbicide options compared to major field crops, making each additional mode of action particularly valuable for sustainable weed management.: Thierry Besancon



Weed Science Date: 9/2/2025

PR# 13923 \* CHEMICAL (MFG)

### **COMMODITY (CROP GROUP)**

PROJECT STATUS

LINURON (TKI)

\* ONION (DRY BULB) (03-07A=ONION, BULB SUBGROUP)

NEED E/CS DATA ONLY

Reasons for need:

Broadleaf Weeds. Control of invasive broadleaf weeds specifically white campion in the West Michigan growing area:01/25; OH: Has a great potential to Ohio Muck growers:07/25; NM: Though white champion is not the main focus in NM, it would still be very effective against other labeled weeds and an added tool to the onion herbicide toolbox:08/25; NY: delayed pre suppresses white campion with minimal injury. Useful tool for broadleaf weed control, including pigweeds:08/25;

REQ STATES MI OH NM NY

NorthEast Region

Α

**NorthCentral Region** 

Α

**Southern Region** 

Α

Western Region

Α

**Reduced Risk** 

### **PCR Use Pattern:**

Make one delayed preemergence broadcast application of Linex 4L at 24 fl oz/a over seeded onions that have sprouted but not yet emerged.

### **HQ Comments:**

Although this request is for a different use pattern, a tolerance can be covered by the ongoing study under PR12816, linuron / onion (dry bulb) where linuron is applied broadcast postemergence over 2-4 leaf onions and this request is primarily for use in onions grown in muck soils:01/25/sb; Per meeting with TKI, project is supported as "Needs ECS data only" 05/25/ds

### **Nomination Justification:**

(2025 CA) same;(2025 MI) See Prev;(2025 FL) See requestor comments.;(2025 NY) This herbicide could be an effective tool for managing Palmer amaranth in muck soils in Orange County, NY, and Powell amaranth in muck-grown onions in Central and Western New York. White campion is also becoming a significant problem in NY muck crop production.;(2025 NJ) See previous comments. Onion production faces substantial challenges from pigweed species, including rapidly spreading populations of Palmer amaranth. Linuron is effective for pigweed control as well as common Imbsquarters, galinsoga and purslane.;

### **IPM Comments from PCR:**

Per requester: Very Good Fit; Delayed pre provided satisfactory control of white campion and an acceptable amount of injury on onions. This product is used in celery which is a rotational crop of onions and controls white campion in celery. This spray was integrated with a "regular" spray program that would be applied in onions and had effects that would enhance yield in onion due to weed control.

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Very Good Fit: See requestor comments.: Kristen Searer-Jones; Very Good Fit: This herbicide adds flexibility to the onion herbicide toolbox.ncorporating this herbicide into an integrated pest management program could provide effective control of Palmer amaranth, as demonstrated in Cornell greenhouse trials, and complement existing onion herbicide programs, which are frequently applied but often insufficient against other pigweed species. Using a diverse set of herbicide tools reduces selection pressure on currently relied-upon materials, helping to manage resistance development. Additionally, many PRE and POST herbicides can injure the crop, reducing plant vigor, competitiveness, and ultimately yield quantity and quality; this product could help mitigate those risks while supporting a more sustainable weed management strategy.: Lynn Sosnoskie; Very Good Fit: See previous comments: Thierry Besancon



Weed Science Date: 9/2/2025

Hoekstra, Jordan

P24-MI-DMP

RECD

Linex 4L applied at 24 fl oz/a (0.75 lb ai/a) as a delayed preemergence 10 days after planting 'Stanley' dry bulb onions in a muck soil. Linuron caused significant crop injury 30 days after application (DAA) compared to the nontreated but was not different from injury from bromoxynil control. Ground cover of white campion 43 DAA was significantly reduced by linuron, compared to the nontreated. Yield data not collected from this trial.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13642 PYRAFLUFEN-ETHYL (NAI)

\* ONION (DRY BULB) (03-07A=ONION, BULB SUBGROUP)

RESEARCHABLE, ONLY RESIDUE DATA NEEDED

Reasons for need:

Annual weeds; probably loss of Dacthal and dire need for alternative herbicides for onion:06/23; NY/Dry bulb onions lack significant chemical tools for the management of emerged weeds (which are especially competitive in young onions). The addition of an active ingredient could enhance the diversity and flexibility of control programs:08/23

**REQ STATES** 

CA OR ID UT NM TX

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

**Reduced Risk** 

### **PCR Use Pattern:**

Postemergence broadcast over 2-If stage onions; 1 or 2 applications; (RTI-TBD, PHI-TBD, though PHI will be variable since application is targeted to crop stage.

## **HQ Comments:**

No tolerance established, but use is labeled in many crop groups, including 03-07A, based on ChemSAC decision that allows preplant use of pyraflufen to be considered as 'non-food' use: 6/23; EPA GREEN: 08/23; Mfg Supports as Potential, E/CS Data before Approval for Residue:09/23; E/CS ongoing, data required before approval for residue study 02/24/DRS; Nichino is currently reviewing E/CS data for possible residue and has agreed to update the status to Under Eval to allow the project to go on nominations while they complete their review:08/25/sb; Nichino will support as Researchable, Only Residue Needed:08/25/sb;

### Efficacy/Crop Safety (E/CS) Data Required:

MFG is concerned with efficacy and phytotoxicity and requires at least 6 E/CS trials in the following states CA(1), PNW (2), S. TX (1), GA(1), NY (1):09/23

### **Nomination Justification:**

(2023 CA) Same; (2023 FL) There is a need for postemergence broadcast over 2-leaf stage onions; this is an important need for Texas growers.; (2023 NY) Weed control options are limited in onions and additional active ingredients are desperately needed for the control of pigweed species, including Palmer amaranth.; (2025 CA) same;

### **IPM Comments from PCR:**

Per requestor: Good Fit with no comments:06/23; VERY GOOD FIT: SAME: WSR; GOOD FIT: SEE PREV COMMENT.: SOR; GOOD FIT: DIVERSIFYING AND EXPANDING CURRENT WEED CONTROL PROGRAM.: NER

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold

BATTS Fennimore, S. P23-CA-DMP RECD NONE

ET HERBICIDE/DEFOLIANT APPLED BROADCAST FOLIAR AT 1, 2 OR 4 FL/A (0.0016, 0.0033 OR 0.0065 LB AI/A) OVER 2-LF 'GREAT WESTERN' DRY BULB ONIONS GROWING IN A SANDY LOAM SOIL. AT 2, 7 AND 14 DAYS AFTER APPLICATION (DAA), CROP INJURY FROM ALL RATES RANGED FROM 26 TO 39. AT 22 DAA, INJURY FROM TWO LOWER RATES HAD DISSIPATED TO 10 AND 13%. WHEN COMPARED TO THE NON-TREATED, ET DID NOT REDUCE HENBIT OR TOTAL WEED DENSITIES. NO DIFFERENCES IN YIELD OR GRADES WEERE SEEN BETWEEN TREATMENTS.



Weed Science

Flojecij					
BATTS	Fennimore, S.	P24-CAP05	RECD	NONE	ET Herbicide/Defoliant applied broadcast at 1, 2, 2.75, 4, or 5.5 fl oz/a (0.0016, 0.0033, 0.00445, 0.0065, or 0.00898 lb ai/a) over 'Great Western' bulb onions seeded into a sandy loam, when ~50% of onions were 2-lf stage. All rates of pyraflufen caused crop injury, with injury from the three higher rates being higher than the standard program through 87 days after application (DAA). At 7 DAA, the two higher rates were required to control hairy nightshade, burning nettle goosefoot and total weed control similar to the standard program. Shepards' purse was not sufficiently controlled by any treatment 7 DAA. With the exception of lower dried weight of large bulbs from the two higher rates, pyraflufen did not impact onion yield or quality.
BATTS	Felix, J.	P24-ORP05	RECD	NONE	ET Herbicide/Defoliant applied broadcast at 1, 2, 2.75, 4, or 5.5 fl oz/a (0.0016, 0.0033, 0.00445, 0.0065, or 0.00898 lb ai/a) over 2-3 leaf 'Vaquero' dry bulb onions seeded into a Owyhee silt loam. Pyraflufen caused 14 to 39% injury 8 days after application (DAA), with an apparent rate response. Injury ranged from 5 to 18% 22 DAA. Only the two highest pyraflufen rates caused injury significantly greater than the standard treatment, bromoxynil + oxyfluorfen. Injury from all treatments was gone by 40 DAA. Overall weed control through 15 DAA was similar across all herbicide treatments with one notable exception. Except for the lowest rate, pyraflufen treatments provided significantly greater common lambsquarters control than the standard treatment 8 DAA. No significant difference occurred between herbicide treatments for total weed counts and weed fresh weights 36 DAA, but there were substantial numeric differences between some of the pyraflufen treatments and the standard treatment for individual weeds. Onion yield by grades from pyraflufen was not different from the standard treatment.
BATTS	Liu, Rui	P24-WAP02	RECD	NONE	ET Herbicide/Defoliant applied broadcast at 1, 2, 2.75, 4, or 5.5 fl oz/a (0.0016, 0.0033, 0.00445, 0.0065, or 0.00898 lb ai/a) over 2-3 leaf 'Legend' dry bulb onions seeded into a Quincy loamy fine sand. Pyraflufen caused 23 to 42% injury 11 days after application (DAA), with an apparent rate response. These values were significantly higher than the comparison standard of oxyfluorfen + bromoxynil. Pyraflufen injury ranged from 9 to 16% 37 DAA and was not statistically greater than the standard (4%) or the untreated (1%). Pyraflufen weed control was generally not statistically different from the standard at 11 or 37 DAA. However, at 37 DAA, all pyraflufen rates provided good to excellent control of most weeds and was noticeably greater than the standard. No yield differences were seen between herbicide treatments, though all pyraflufen treatments did have numerically fewer levels of small-diameter onions.
BATTS	Performance Summary	P25-HQ-SUM	RECD	NONE	SUMMARY OF IR-4 PRODUCT PERFORMANCE PREPARED BY RBB. INCLUDES DATA FROM FT ID#s 24-CAP05, 24-WAP02, & 23-CA-DMP. FORWARDED TO NICHINO. 08/25

Date: 9/2/2025



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13465 \*

GLUFOSINATE (BASF, UPL NA)

\* ONION (03-07AB=ONION BULB AND GREEN SUBGROUPS)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

EARLY SEASON WEEDS. EARLY SEASON WEEDS IN ONIONS ARE HIGHLY INJURIOUS TO CROP YIELDS AND QUALITY. THIS PRODUCT PROVIDES A VALUABLE TOOL FOR CONTROLLING EARLY SEASON WEEDS; OH/Alternative to Glyphosate for burndown preplant:08/23; NY/Burndown options are needed as onions are susceptible to early competition. Paraquat (a possible non-selective option) labeling has specified that it should not be used on muck (also human health/injury concerns):07/24/sb;

**REQ STATES** CA OR OH NY

NorthEast Region

Α

**NorthCentral Region** 

Α

**Southern Region** 

Α

Western Region

Α

**Reduced Risk** 

### **PCR Use Pattern:**

RELY 280; DOSAGE 0.79 LB AI/A, APPLY TO EMERGED WEEDS PRIOR TO PLANTING/ TRANSPLANTING THE CROP AS A PREPLANT BURNDOWN APPLICATION, 1 APPLICATION, RTI 1 DAY, PHI 14 DAYS; MAKE A SINGLE APPLICATION OR MULTIPLE APPLICATIONS UPTO 3 DAYS BEFORE PLANTING/TRANSPLANTING; A MAX OF 1.6 LB AI/A MUST BE APPLIED PREPLANT.

### **HQ Comments:**

AFTER CONSULTATION WITH REQUESTER & RBB, THE COMMODITY IS BEING CHANGED TO "ONION" TO ALLOW FOR CONSIDERATION OF DRY BULB & GREEN ONION IN ORDER TO COVER THE ENTIRE 03-07 CROP GROUP:07/22; No efficacy data is needed, but crop safety data is requested. BASF generally agrees with proposed use pattern ... 0.79 lb ai/A applied preplant burndown (PPB) with short retreatment interval if sequential applications are needed and some length of planting interval depending on the onion types to be planted (direct seeded vs. transplanting)EPA HOLD CAUTION:08/23.

#### **Nomination Justification:**

(2022 CA) See previous;(2022 FL) See previous comment.;(2023 MI) See Prev;(2024 MI) See Prev;(2024 NY) Burndown options are needed as onions are susceptible to early competition. Paraquat (a possible non-selective option) labeling has specified that it should not be used on muck (also human health/injury concerns);(2024 MD) see previous;(2024 NJ) Alternate solution needed for controlling of glyphosate-resistant weeds in long-season crops (including onions);(2025 CA) same;(2025 MI) Valuable for burndown in OH muck;(2025 FL) See previous comments.;(2025 NY) In NY, Burndown options are needed as onions are susceptible to early weed competition. Paraquat (a possible non-selective option) labeling has specified that it should not be used on muck (also human health/injury concerns);(2025 NJ) Onion growers require additional burndown herbicide options since the crop is highly sensitive to early weed competition that can severely impact yield potential. Although paraquat provides non-selective control, its label restrictions prohibit application on muck soils where many onions are grown, and the herbicide's human health concerns and restricted-use status limit its practical utility for many operations.;

### **IPM Comments from PCR:**

PER REQUESTER: VERY GOOD FIT; GLUFOSINATE PROVIDES A SAFE AND EFFICACIOUS MEANS OF CONTROLLING AN INITIAL FLUSH OF WEEDS PRIOR TO PLANTING. IT IS COMPATIBLE WITH AND ENHANCES OTHER CULTURAL PRACTICES FOR CONTROLLING WEEDS IN THE CROP:07/22 VERY GOOD FIT: SEE PREV: NCR; VGF-NCR & NER:08/24; NY:GF: glyphosate resistant weed species are encroaching into onion production in nys; alternate burndown options are critical:08/24;

### **IPM Comments from Nomination Process:**



Weed Science Date: 9/2/2025

; Very Good Fit: same: Kari Arnold; Very Good Fit: See requestor comments.: Kristen Searer-Jones; Very Good Fit: Glufosinate provides a safe and effective means of controlling early-season weed flushes prior to planting, making it an excellent fit for integrated weed management in onions. Early-season weeds in onions are highly injurious, reducing both yield and quality, and timely control is critical. In New York and other regions, glyphosate-resistant weed species are increasingly encroaching into onion production, creating a need for alternative burndown options. Existing non-selective herbicides, such as paraquat, are restricted on certain soils (e.g., muck) and pose human health risks, further limiting options. Glufosinate is compatible with and enhances cultural practices, providing growers with a flexible tool to manage early-season weeds while supporting other IPM strategies. Its inclusion in onion production programs helps reduce reliance on single modes of action, mitigates the risk of resistance development, and improves the overall sustainability and efficacy of weed management.: Lynn Sosnoskie; Very Good Fit: Early-season weed control is critical in onion production due to the crop's sensitivity to competition, but growers face increasing challenges from glyphosate-resistant species and restrictions on alternatives like paraquat use on muck soils. Glufosinate provides an effective, safe burndown solution that supports integrated weed management principles by diversifying available modes of action and reducing resistance selection pressure.: Thierry Besancon



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13995 ICAFOLIN-METHYL (BAYER)

Α

\* ONION (03-07AB=ONION BULB AND GREEN SUBGROUPS)

HOLD

Reasons for need:

Icafolin-methyl (ICA) is most effective vs grasses, with some early braodleaf activity (rate and timing dependent), but little sedge activity. Loss of Dacthal requires optiions for hericides. Icafolin-methyl (ICA) would control a similar set of weed species. MI: Icafolin-methyl controls annual grasses and some broadleaf weeds with both preemergence and early postemergence activity. A new site of action would improve resistance management and broaden weed control programs in MI:08/25;

REQ STATES CA MI NY

**NorthEast Region** 

NorthCentral Region

Southern Region

Western Region

Α

**Reduced Risk** 

### **PCR Use Pattern:**

Based on info shared by Bayer, IR-4 sugg: Make one broadcast preplant application over emerged weeds at 0.044 to 0.134 lb ai/a. Treatment should include either a crop oil concentrate or a methylated seed oil.

## **HQ Comments:**

Key Export Market: Canada; EPA PENDING:08/25; Bayer has asked this status be updated from Under Eval to (Mfg) HOLD at this time:08/25/sb;

Α

### **Nomination Justification:**

(2025 CA) same; (2025 MI) See Prev; (2025 NY) Onions are particularly vulnerable to weed competition. Herbicide options are limited (and sometimes not sufficiently effective) in the crop. Some registered products can cause significant crop injury (stunting, leaf burning) that reduce crop vigor and impact yield.;

### **IPM Comments from PCR:**

Per Requester: Good Fit; New MOA on emerged weeds may support reduced resistance with rotation options, less reliance on few products. Use is compatible with cultural pest management practices:06/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Very Good Fit: Icafolin-methyl (ICA) is a herbicide with preemergence and early postemergence activity, primarily effective against annual grasses and some broadleaf weeds, with limited control of sedges. It offers a novel mode of action, making it a valuable tool for herbicide rotation and resistance management in crops like onions. The addition of a new MOA into onions will support resistance management by reducing the selection pressure on currently available products. Broadening the weed control toolbox is one goal of IPM.: Lynn Sosnoskie



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13957 BROMOXYNIL (NUFARM)

\* ONION (SEED CROP) (03-07AB=ONION BULB AND GREEN SUBGROUPS)

**UNDER EVALUATION** 

Reasons for need:

postemergence herbicide options. Lack of current available options for green onion seed production. Product registered in dry bulb onion crops in other regions but not for western Oregon. Current label states "Do not use this product on onions grown under low light intensity, in areas such as Oregon, west of the Cascades.":05/25;

REQ STATES OR

. . . \_ . .

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

**Reduced Risk** 

### **PCR Use Pattern:**

Make one application of Maestro 4EC at 0.5 to 0.75 pt/a over 2 to 5 leaf green onions. See Maestro 4EC label for further application guidance.

### **HQ Comments:**

Key Export Market likely in EU. Phytotoxicity not expected: supporting data, which included 0.21 to 1.3 pt/a, caused little to no crop injury 05/25/ds. The commodity listed is onion (seed crop), but the request is specifically for green onion seed production 05/25/ds; EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Good Fit; Increase the diversity of tools available for weed control in onion seed production which will allow for greater rotations of herbicide modes of action:05/25;

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold

Becerra-Alvarez, Aaron P22-OR-DMP RECD Maestro 4EC applied at 3.45, 6.9, 13.8, or 20.7 fl oz/a (0.108, 0.216, 0.431, or 0.647

Ib ai/a) over three green onion varieties at the 2 or 4 leaf stage. Crops were growing in a silty clay loam. Little to no crop injury observed through 40 days after application, regardless of rate or timing. Onion biomass was not impacted by bromoxynil treatments. Control of weeds in the trial from bromoxynil was reported as

poor.

Becerra-Alvarez, Aaron P24-OR-DMP RECD

Maestro 4EC applied at 3.99, 11.97, or 24.0 fl oz/a (0.1258, 0.375, or 0.75 lb ai/a) over 2 or 4 leaf stage. Researcher commented that weed control from early timings

was better than later timings, but was not great from any treatment in the trial. Crop injury from bromoxynil was not different from the weed-free check. Crop biomass was variable within herbicide treatments and were not different from each other.

though all were significantly lower than the weed-free.



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13935 \*

FLUMIOXAZIN + PYROXASULFONE (KICHEM, VALENT)

\* GREENS (MUSTARD) (SEED CROP) (04-16=LEAFY VEGETABLE GROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

brassica weeds. To control brassica weeds in brassica seed crops like sheperd's purse and mustard weeds with charcoal band. Brassica seed crops are high-value (\$25M industry) and require fields clean of weed to achieve pure seed products. Growers in the western Oregon area are familiar with charcoal banding since it is commonly used in grass seed crops with Fierce EZ:04/25;

OR **REQ STATES** 

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

Reduced Risk

### **PCR Use Pattern:**

Make one application of Fierce EZ Herbicide, at 3.0 fl oz/A, as a broadcast treatment over the seed rows that have the activated carbon band above them. The activated carbon over the seed row will adsorb Fierce EZ Herbicide and allow the seed beneath to germinate. Apply activated carbon at 25 lb/A in a 1 inch band (equal to a 300 lb/A broadcast application) at planting. Apply to smooth, crop residue-free seedbeds

## **HQ** Comments:

One request was received for "brassicas grown for seed", so 3 pr#s were created from the request based on the rep crops: 13933/Broccoli (Seed Crop), 13934/Cabbage (Seed Crop) & Greens (Mustard) (Seed Crop); Key Export Market: EU: This request matches a labeled Chateau EZ use for grasses grown for seed:04/25/sb;

#### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per requester: Good Fit; Brassica seed crop growers are limited on herbicides available to use. Brassica weeds like sheperd's purse have become more prevalent in fields in recent years and control options are very limited. An additional herbicide like Fierce with carbon seeding would allow for greater rotation on herbicides and control of brassica weeds. The application with charcoal band will allow for improved establishment of the crop and may allow for reduced need of herbicides later in the season; therefore, reducing overall herbicide applications in the season:04/25;

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

COMMODITY (CROP GROUP)

PROJECT STATUS

13386 \*

HALAUXIFEN-METHYL+FLORASULAM (CORTEVA)

\* SPINACH (04-16A=LEAFY GREENS SUBGROUP)

NEED E/CS DATA ONLY

**REQ STATES** 

Reasons for need: LABEL CURRENTLY DOES NOT ALLOW FOR ROTATING TO SPINACH THE FOLLOWING SEASON; BEING ABLE TO USE THIS PRODUCT IN ROTATIONAL CROPS WILL ALLOW FOR A MORE DIVERSE HERBICIDE ROTATION OVER A 2-YR PERIOD; IT WILL ALLOW FARMERS TO ACHIEVE EFF WEED CONTROL PRIOR TO PLANTING SPINACH & IMPROVE OVERALL CONTROL; NY-Effective weed control in crops with few herbicide options will require the development of systems approaches that support effective weed suppression in preceding years. Current label plantback restrictions may prevent the development of strong crop rotation programs:07/24/sb;

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

**Reduced Risk** 

DF NY NJ

### PCR Use Pattern:

QUELEX AT 0.75 OZ WT APPLIED POSTEMERGENCE IN WHEAT WITH 1 APPLIC; APPLY WITH THE EXISTING LABEL REQUIREMENTS; NOT CERTRAIN OF THE LIMITATIONS **HQ Comments:** 

CORTEVA CONSIDERING USING CONFINED ROTATIONAL DATA TO SUPPORT THESE REQUESTS WITHOUT RESIDUE STUIDES:06/22;; EPA GREEN: 08/23

### Efficacy/Crop Safety (E/CS) Data Required:

MFG just needs crop safety data: 6/23 JPB;

### **Nomination Justification:**

(2022 MD) see database comments. My not be necessary to gather data for less than 30 days preplant.;(2023 CA) Same;(2023 MD) could likely include other requested crops in protocol;(2024 NY) If new herbicide active ingredients will not be registered for use in specialty crops, we need to shorten the rotation restrictions to allow for specialty crops to follow agronomic commodities that have effective weed control options.;(2024 MD) see previous;(2024 NJ) Diversification of MoA for better overall weed control in systems with limited crop rotation;(2025 MD) see previous comments;(2025 NJ) Crops with limited herbicide options require systems-based weed management approaches that suppress weed populations in preceding years to reduce pressure on the vulnerable crop. However, current herbicide plantback restrictions can prevent effective crop rotation programs by limiting herbicide selections in rotational crops, undermining the multi-year weed suppression strategies these systems depend on.;

#### **IPM Comments from PCR:**

PER REQUESTER. VERY GOOD FIT: ALLOWS FOR A MORE DIVERSE HERBICIDE ROTATION OVER 2-YR PERIOD: ALLOWS FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SPINACH AND IMPROVE OVERALL WEED CONTROL; VERY GOOD FIT: SAME: WSR; VERY GOOD FIT: SEE PREV COMMENTS: NER; VGF-NER:08/24; NY: Good fit: allows for a more diverse herbicide rotation over 2-yr period; allows farmers to achieve effective weed control prior to planting spinach and improve overall weed control:08/24; NJ: good fit: diversification of moa for better overall weed control in systems with limited crop rotation;08/24;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman; Good Fit: Given the limited likelihood of new herbicide registrations for specialty crops, reducing plantback restriction intervals becomes essential to enable specialty crop production following agronomic commodities that utilize effective weed management programs.: Thierry Besancon

Pena, Marco

P20-AZ-DMP

**RECD** 

NONE

ELEVORE APPLIED BROADCAST TO CLAY SOIL AT 1 FL OZ/A (0.0045 LB AE/A) ONE DAY PRIOR TO PLANTING. MINOR CROP INJURY (5%) OBSERVED 23 DAYS AFTER PLANTING.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13364 METRIBUZIN (ADAMA, UPL NA)

\* SPINACH (04-16A=LEAFY GREENS SUBGROUP)

UNDER EVALUATION

Reasons for need:

CURRENTLY THE LABEL DOES NOT ALLOW FOR ROTATING TO SPINACH THE FOLLOWING SEASON. BEING ABLE TO USE METRIBUZIN IN ROTATIONAL CROPS WILL ALLOW FOR A MORE DIVERSE HERBICIDE ROTATION OVER A 2-YR PERIOD. IT WILL ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SPINACH AND IMPROVE OVERALL CONTROL.

**REQ STATES** DE NY

**NorthEast Region** 

Α

NorthCentral Region

**Southern Region** 

Western Region

**Reduced Risk** 

### **PCR Use Pattern:**

METRIBUZIN 75DF APPLY AT 3 TO 12 OZ WT TO THE SOIL FOR SOYBEAN, WITH 1 APPLICATION. APPLY TO SOYBEANS WITH THE EXISTING LABEL REQUIREMENTS. MAY NOT BE COMPATIBLE WITH LATE PLANTED SOYBEAN.

## **HQ Comments:**

EPA CAUTION: 08/21; 2022 workshop docs indicate support was Potential: E/CS before approval for Residue:08/25/sb; E/CS data being collected in multi-crop trials under metribuzin/spinach priority, See PR 13362 E/CS protocol, JPB, 08/23; Status changed from "ECS data ongoing" to "Covered By Another Project". Data is covered under P13362 Metribuzin/Snap Bean 05/24/drs; ADAMA is currently reviewing E/CS data so the status was changed from Cov by Another Project to Under Eval to allow the project to go on nominations while they review:08/25/sb;

#### **Nomination Justification:**

(2022 MD) see database comments.;(2025 NY) Weeds are a significant problem in spinach as the crop herbicide toolbox is limited.;(2025 NJ) Crops with limited herbicide options require systems-based weed management approaches that suppress weed populations in preceding years to reduce pressure on the vulnerable crop. However, current herbicide plantback restrictions can prevent effective crop rotation programs by limiting herbicide selections in rotational crops, undermining the multi-year weed suppression strategies these systems depend on.;

### **IPM Comments from PCR:**

PER REQUESTER, VERY GOOD FIT. THIS ALLOWS FOR A MORE DIVERSE HERBICIDE ROTATION OVER 2-YR PERIOD. IS EFFECTIVE ON AMARANTHUS SPECIES TO ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SPINACH AND IMPROVE OVERALL WEED CONTROL.

### **IPM Comments from Nomination Process:**

; Very Good Fit: Effective weed management in spinach production requires a diverse and strategically planned herbicide rotation. Currently, metribuzin is not labeled for use in crops preceding spinach, limiting growers' ability to manage resistant and difficult weed species, such as Amaranthus. Allowing metribuzin use in rotational crops would support a more robust two-year herbicide rotation, helping to reduce weed pressure prior to spinach planting and improve overall control. Re-evaluating rotation restrictions would enhance growers' ability to implement sustainable weed control strategies and maintain spinach crop quality and yield.: Lynn Sosnoskie; Good Fit: Given the limited likelihood of new herbicide registrations for specialty crops, reducing plantback restriction intervals becomes essential to enable specialty crop production following agronomic commodities that utilize effective weed management programs.: Thierry Besancon

Culpepper, A. Stanley

P23-GA-DMP

RECD

Glory FDF (75%) applied broadcast preemrgence at 5.33 or 10.66 oz/a (0.25 or 0.5 lb ai/a) to late-season soybeans seeded in a loamy sand, then followed by seeding 'Rushmore' spinach 87 days after treatment. No spinach injury, plant stand reducitons or vigor reductions were observed. Heavy rainfall between metribuzin application and spinach seeding may have helped with this crop safety by leaching metribuzin through this coarse soil.



Performance Summary

# **2025 Food Use Workshop Priority 'A' Nominations**

 Vollmer, Kurt (MD)	P23-MD-DMP	RECD	Glory FDF (75%) applied broadcast preemergence at 5.0 or 10 oz/a (0.234 or 0.47 lb ai/a) to late-season soybeans seeded in a silt loam, then followed by seeding 'Bloomsdale Long Standing' spinach 107 days after treatment. Average crop injury
			from metribuzin treatments was not significant, though some individual plots did show 10 to 15% injury at 28 and 42 days after planting
VanGessel, M.	P23-DE-DMP	RECD	Glory FDF (75%) applied broadcast preemergence at 5.3 or 10.6 oz/a (0.248 or 0.497 lb ai/a) to late-season soybeans seeded in a Klej loamy sand, then followed by seeding 'SV2157VB' spinach 239 days after treatment. Little to no crop injury, no significant stand reductions and no negative impact on yields seen from metribuzin treatments.

Weed Science

RECD

P24-HQ-SUM

SUMMARY OF IR-4 PRODUCT PERFORMANCE PREPARED BY RBB. INCLUDES

DATA FROM FT ID#s 23-DEP-DMP, 23-MD-DMP, and 23-GA-DMP. FORWARDED

TO REGISTRANTS:12/24

Date: 9/2/2025



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

13375 \*

SULFENTRAZONE (FMC)

\* SPINACH (04-16A=LEAFY GREENS SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

CURRENTLY THE LABEL DOES NOT ALLOW FOR ROTATING TO SPINACH THE FOLLOWING SEASON; BEING ABLE TO USE SULFENTRAZONE IN ROTATIONAL CROPS WILL ALLOW FOR A MORE DIVERSE HERBICIDE ROTATION OVER A 2-YR PERIOD; IT WILL ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR

REQ STATES DE NJ

TO PLANTING SPINACH AND IMPROVE OVERALL CONTROL

**NorthEast Region** 

Α

**NorthCentral Region** 

**Southern Region** 

Α

Western Region

Reduced Risk

### **PCR Use Pattern:**

SPARTAN 4L, NUMEROUS FORMULATIONS, AT RATE OF 6-12 FL OZ, SOIL APPLIED FOR SOYBEAN WITH 1 APPLIC; APPLY WITH EXISTING LABEL REQUIREMENTS FOR SOYBEAN: MAY NOT BE COMPATIBLE WITH LATE PLANTED SOYBEAN

## **HQ Comments:**

EPA GREEN 08/22

### **Nomination Justification:**

(2022 MD) see database comments.;(2023 CA) Same;(2023 MD) See previous comments;(2024 MD) see previous;(2024 NJ) Few herbicides available for use in spinach for weed control; greater flexibility in use patterns would help improve weed control;(2025 MD) see previous comments;(2025 FL) See previous comments.;(2025 NJ) Crops with limited herbicide options require systems-based weed management approaches that suppress weed populations in preceding years to reduce pressure on the vulnerable crop. However, current herbicide plantback restrictions can prevent effective crop rotation programs by limiting herbicide selections in rotational crops, undermining the multi-year weed suppression strategies these systems depend on.;

### **IPM Comments from PCR:**

PER REQUESTER, A VERY GOOD FIT; ALLOWS FOR A MORE DIVERSE HERBICIDE ROTATION OVER 2-YR PERIOD; IS EFFECTIVE ON AMARANTHUS SPECIES TO ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SPINACH AND IMPROVE OVERALL WEED CONTROL; FAIR FIT: REDUCE ROTATIONAL RESTRICTIONS: WSR; VERY GOOD FIT: SEE PREV COMMENTS: NER

### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman; Very Good Fit: See previous comments.: Kristen Searer-Jones; Good Fit: Given the limited likelihood of new herbicide registrations for specialty crops, reducing plantback restriction intervals becomes essential to enable specialty crop production following agronomic commodities that utilize effective weed management programs.: Thierry Besancon

Pena, Marco

P20-AZ-DMP

RECD

NONE

ZEUS APPLIED BROADCAST TO CLAY SOIL AT 5 FL OZ/A (0.156 LB AI/A) ONE DAY PRIOR TO PLANTING. 100% CROP INJURY OBSERVED 23 DAYS AFTER PLANTING.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14045 CLETHODIM (ADAMA, UPL NA, VALENT)

PARSLEY (SEED CROP) (04-16A=LEAFY GREENS SUBGROUP)

**UNDER EVALUATION** 

Reasons for need:

Various weedy grasses including rattail fescue, Vulpia myuros. Recent changes to label wording explicitly disallow use on seed crops, when before advisory wording was used on the label. There is no specific use directions for carrot seed or parsley seed. Clethodim was previously used on many carrot seed acres and all parsley seed acres in Central Oregon, without it, weed control will suffer and seed quality reduced. There are limited option for grass herbicides in parsley, only two including clethodim:06/25;

REQ STATES OR

**NorthEast Region** 

**NorthCentral Region** 

**Southern Region** 

Western Region

Α

Reduced Risk

### **PCR Use Pattern:**

Make up to four foliar broadcast applications of Select Max at 9 to 16 fl oz/a, at least 14 days apart and no closer than 30 days before harvesting for seed. See label for adjuvant guidance. Do not apply more than 64 fl oz/year.

### **HQ Comments:**

Request indicates this is an export commodity. This use is labeled for dried parsley. EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Good Fit; Clethodim plays a significant role in the existing integrated weed management plans for parsley seed production in Oregon. It effectively manages difficult to control weedy grasses and would prevent dominant weed population shifts of taking over fields when used in conjunction with other management options:06/25;

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14035 METAMITRON (ADAMA, BAYER)

SWISS CHARD (04-16A=LEAFY GREENS SUBGROUP)

UNDER EVALUATION

Reasons for need:

WEEDS. Weeds: pigweeds (including multiple-resistance Palmer amaranth). Swiss chard growers have few available herbicide options to use for broadleaf weed control:06/25;

**REQ STATES** 

NJ

NorthEast Region

No

**NorthCentral Region** 

**Southern Region** 

Western Region

Reduced Risk

### **PCR Use Pattern:**

Make one broadcast soil application of Goltix at 1.7 pt/a after seeding and before crop emergence.

### **HQ Comments:**

XH208 dmp only was converted to this new pr# 14035. EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 NJ) Very limited PRE option labeled for use on swiss chard. Metamitron has demonstrated strong crop safety in European and New Zealand table beet registrations and through U.S. Section 18 authorizations for sugar beet production. New Jersey trials in 2024 evaluated a metamitron-ethofumesate formulation (Torero) at 1X and 2X rates, showing excellent crop tolerance and no yield reduction compared to the cycloate standard (Up-beet). Pre-emergence applications achieved =90% control of challenging weeds including lambsquarters, pigweed, purslane, and galinsoga species. Post-emergence treatments maintained crop selectivity when applied to 2- to 4-leaf beets targeting weeds under 4 inches tall. Possible evaluation for swiss chard under PR #13978; Garden beets and swiss chard are the same species used differently (root vs leafy green).;

#### **IPM Comments from PCR:**

Per Requester: Good Fit; Good Fit; metamitron would provide an additional tool for broadleaf weed control in swiss chard production systems throughout the mid-Atlantic region. Currently available herbicide options rely on older chemistries that face potential regulatory restrictions and may become unavailable in the near future due to re-registration challenges or product discontinuation. Therefore, new herbicide alternatives should be explored and evaluated to ensure continued effective weed management strategies for swiss chard growers in this region:06/25;

### **IPM Comments from Nomination Process:**

; Very Good Fit: Excellent crop safety on red beets grown on New Jersey sandy soils was demonstrated in 2024 field trials. The limited availability of effective postemergence (POST) herbicide options for beets necessitates heavy reliance on preemergence (PRE) applications for weed suppression during the critical crop establishment phase. This dependence on PRE herbicides is particularly important because: (1) beets are slow to establish canopy cover, providing extended opportunities for weed competition; (2) mechanical cultivation options are restricted due to the crop's potential for root damage; (3) hand weeding is labor-intensive and economically prohibitive for commercial production; (4) early-season weed competition can significantly reduce both yield and root quality, making prevention through effective PRE control essential for maintaining crop value; and (5) metamitron provides broad-spectrum weed control against species problematic in beet production, potentially reducing the need for multiple POST applications with currently registered herbicides.: Thierry Besancon

Brandenberger, L.	P04-OK-DMP	RECD	NONE	-	11.4 LB AI/A PRE; RELATIVELY SAFE, EQUAL TO S-METOLACHLOR; EQUAL CONTROL OF WEEDS (PIGWEED, GOOSEGRASS, CARPETWEED AND HENBIT), LOWER YIELD
Brandenberger, L.	P04-OK-DMP	RECD	NONE	-	11.4 LB AI/A PRE; RELATIVELY SAFE, EQUAL TO S-METOLACHLOR; EQUAL CONTROL OF WEEDS (PIGWEED, GOOSEGRASS, CARPETWEED AND HENBIT), LOWER YIELD



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

COMMODITY (CROP GROUP)

PROJECT STATUS

13933 \*

FLUMIOXAZIN + PYROXASULFONE (KICHEM, VALENT)

\* BROCCOLI (SEED CROP) (05-16=BRASSICA HEAD AND STEM VEGETABLE GROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR RESIDUE STUDY

Reasons for need: brassica weeds. To control brassica weeds in brassica seed crops like sheperd's purse and mustard weeds with charcoal band. Brassica seed crops are high-value (\$25M industry) and require fields clean of weed to achieve pure seed products. Growers in the western Oregon area are familiar with charcoal banding since it is commonly used in grass seed crops with Fierce EZ:04/25;

OR **REQ STATES** 

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

Reduced Risk

### **PCR Use Pattern:**

Make one application of Fierce EZ Herbicide, at 3.0 fl oz/A, as a broadcast treatment over the seed rows that have the activated carbon band above them. The activated carbon over the seed row will adsorb Fierce EZ Herbicide and allow the seed beneath to germinate. Apply activated carbon at 25 lb/A in a 1 inch band (equal to a 300 lb/A broadcast application) at planting. Apply to smooth, crop residue-free seedbeds

## **HQ** Comments:

One request was received for "brassicas grown for seed", so 3 pr#s were created from the request based on the rep crops: 13933/Broccoli (Seed Crop), 13934/Cabbage (Seed Crop) & Greens (Mustard) (Seed Crop); Key Export Market: EU: This request matches a labeled Chateau EZ use for grasses grown for seed:04/25/sb;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per requester: Good Fit; Brassica seed crop growers are limited on herbicides available to use. Brassica weeds like sheperd's purse have become more prevalent in fields in recent years and control options are very limited. An additional herbicide like Fierce with carbon seeding would allow for greater rotation on herbicides and control of brassica weeds. The application with charcoal band will allow for improved establishment of the crop and may allow for reduced need of herbicides later in the season; therefore, reducing overall herbicide applications in the season:04/25;

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

COMMODITY (CROP GROUP)

PROJECT STATUS

13934 \*

FLUMIOXAZIN + PYROXASULFONE (KICHEM, VALENT)

\* CABBAGE (SEED CROP) (05-16=BRASSICA HEAD AND STEM VEGETABLE GROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR RESIDUE STUDY

Reasons for need: brassica weeds. To control brassica weeds in brassica seed crops like sheperd's purse and mustard weeds with charcoal band. Brassica seed crops are high-value (\$25M industry) and require fields clean of weed to achieve pure seed products. Growers in the western Oregon area are familiar with charcoal banding since it is commonly used in grass seed crops with Fierce EZ:04/25;

OR **REQ STATES** 

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

Reduced Risk

### **PCR Use Pattern:**

Make one application of Fierce EZ Herbicide, at 3.0 fl oz/A, as a broadcast treatment over the seed rows that have the activated carbon band above them. The activated carbon over the seed row will adsorb Fierce EZ Herbicide and allow the seed beneath to germinate. Apply activated carbon at 25 lb/A in a 1 inch band (equal to a 300 lb/A broadcast application) at planting. Apply to smooth, crop residue-free seedbeds

## **HQ Comments:**

One request was received for "brassicas grown for seed", so 3 pr#s were created from the request based on the rep crops: 13933/Broccoli (Seed Crop), 13934/Cabbage (Seed Crop) & Greens (Mustard) (Seed Crop); Key Export Market: EU: This request matches a labeled Chateau EZ use for grasses grown for seed:04/25/sb;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per requester: Good Fit; Brassica seed crop growers are limited on herbicides available to use. Brassica weeds like sheperd's purse have become more prevalent in fields in recent years and control options are very limited. An additional herbicide like Fierce with carbon seeding would allow for greater rotation on herbicides and control of brassica weeds. The application with charcoal band will allow for improved establishment of the crop and may allow for reduced need of herbicides later in the season; therefore, reducing overall herbicide applications in the season:04/25;

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13387 \*

HALAUXIFEN-METHYL+FLORASULAM (CORTEVA)

\* BEAN (SNAP) (06-22A=EDIBLE PODDED BEAN SUBGROUP)

NEED E/CS DATA ONLY

Reasons for need: LABEL CURRENTLY DOES NOT ALLOW FOR ROTATING TO SNAPBEAN THE FOLLOWING SEASON; BEING ABLE TO USE HALAUXIFEN + FLORASULAM IN ROTATIONAL CROPS WILL ALLOW FOR A MORE DIVERSE HERBICIDE ROTATION OVER A 2-YR PERIOD; IT WILL ALLOW FARMERS TO ACHIEVE EFF WEED CONTROL PRIOR TO PLANTING SNAPBEAN & IMPROVE OVERALL CONTROL; NY-Effective weed control in crops with few herbicide options will require the development of systems approaches that support effective weed suppression in preceding years. Current label plantback restrictions may prevent the development of strong crop rotation programs:07/24/sb;

**REQ STATES** DF MD NY

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

**Reduced Risk** 

### PCR Use Pattern:

QUELEX AT 0.75 OZ WT POSTEMERGENCE IN WHEAT, WITH 1 APPLIC; APPLY WITH THE EXISTING LABEL REQUIREMENTS; NOT CERTAIN OF LIMITATIONS

## **HQ Comments:**

CORTEVA CONSIDERING USING CONFINED ROTATIONAL DATA TO SUPPORT THESE REQUESTS WITHOUT RESIDUE STUIDES:06/22:

### Efficacy/Crop Safety (E/CS) Data Required:

MFG just needs crop safety data: 6/23 JPB;

### **Nomination Justification:**

(2022 MD) see database comments. Corteva looking to see if they are covered for 30 days; (2023 MD) Could likely include other requested crops in the protocol; (2024 NY) Effective weed control in crops with few herbicide options will require the development of systems approaches that support effective weed suppression in preceding years. Current label plantback restrictions may prevent the development of strong crop rotation programs.;(2024 MD) see previous;(2024 NJ) Few herbicides available for use in snap beans for weed control; greater flexibility in use patterns would help improve weed control, which can impact yield and harvestability; (2025 MD) see previous comments; (2025 MI) See Prev; (2025 NJ) Crops with limited herbicide options require systems-based weed management approaches that suppress weed populations in preceding years to reduce pressure on the vulnerable crop. However, current herbicide plantback restrictions can prevent effective crop rotation programs by limiting herbicide selections in rotational crops, undermining the multi-year weed suppression strategies these systems depend on.;

### **IPM Comments from PCR:**

PER REQUESTER, A VERY GOOD FIT; ALLOWS FOR A MORE DIVERSE HERBICIDE ROTATION OVER 2-YR PERIOD; ALLOWS FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SNAPBEAN AND IMPROVE OVERALL WEED CONTROL; VGF-NER; VGF-NER: 08/24; NY: Very good fit: the inability to follow crops with strong herbicide programs puts more selection pressure on the limited herbicides available in specialty crops:08/24;

### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman; Good Fit: Given the limited likelihood of new herbicide registrations for specialty crops, reducing plantback restriction intervals becomes essential to enable specialty crop production following agronomic commodities that utilize effective weed management programs: Thierry Besancon



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13362 METRIBUZIN (ADAMA, UPL NA)

\* BEAN (SNAP) (06-22A=EDIBLE PODDED BEAN SUBGROUP)

**UNDER EVALUATION** 

Reasons for need:

CURRENTLY THE LABEL DOES NOT ALLOW FOR ROTATING TO SNAP BEANS THE FOLLOWING SEASON; BEING ABLE TO USE METRIBUZIN IN ROTATIONAL CROPS WILL ALLOW FOR A MORE DIVERSE HERBICIDE ROTATION OVER A 2-YR PERIOD; IT WILL ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SNAPBEANS AND IMPROVE OVERALL CONTROL

**REQ STATES** DE MD OH OR NY

**NorthEast Region** 

Α

**NorthCentral Region** 

**Southern Region** 

Western Region

Reduced Risk

### **PCR Use Pattern:**

METRIBUZIN 75DF, APPLY AT 3-12 OZ WT, TO SOIL WITH 1 APPLIC; APPLY TO SOYBEANS WITH THE EXISTING LABEL REQUIREMENTS; MAY NOT BE COMPATIBLE WITH LATE-PLANTED SOYBEAN

## **HQ Comments:**

EPA CAUTION:08/21, 08/23; 2022 workshop docs indicate support was Potential: E/CS before approval for Residue:08/25/sb; Performance protocol covers additional PR#s: 13383 Metribuzin/Lima bean, 13356 Metribuzin/Sweetpotato, 13363 Metribuzin/Watermelon, & 13364 Metribuzin/Spinach 05/24/drs; XH702 covers pre-emergent use 03/25/ds; ADAMA is currently reviewing E/CS data so the status was changed from E/CS ongoing to Under Eval to allow the project to go on nominations while they review:08/25/sb;

### **Nomination Justification:**

(2022 MD) see database comments.;(2022 MI) same;(2025 NY) Current label restrictions prohibit the use of metribuzin in crops preceding snap beans, limiting herbicide rotation options for growers. Allowing metribuzin use in rotational crops would enable a more diverse and strategic herbicide program over a two-year period, improving long-term weed management and resistance mitigation. Metribuzin is particularly effective against Amaranthus species, which are increasingly problematic in many production systems. Its use prior to planting snap beans would enhance early-season weed control, reduce weed pressure at planting, and contribute to more effective, sustainable weed management overall.;(2025 NJ) Here's a shorter version: Specialty crops with limited herbicide options require systems-based weed management that suppresses weed populations in preceding crop years to reduce pressure on the vulnerable crop. However, herbicide plantback restrictions—ranging from 4 to 18+ months—significantly limit effective crop rotations by constraining herbicide selections in rotational crops. This forces growers to use suboptimal weed control in preceding agronomic crops, undermining the multi-year suppression strategies that specialty crop systems depend on.:

### **IPM Comments from PCR:**

PER REQUESTER, VERY GOO FIT; ALLOWS FOR A MORE DIVERSE HERBICIDE ROTATION OVER 2-YR PERIOD; IS EFFECTIVE ON AMARANTHUS SPECIES TO ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SNAP BEANS AND IMPROVE OVERALL WEED CONTROL

### **IPM Comments from Nomination Process:**

; Very Good Fit: Strong crop rotation programs are essential for sustainable weed management, but their effectiveness depends on the availability of herbicides that can be safely used in preceding crops. Allowing metribuzin use in rotational crops would support more diverse herbicide programs over a two-year cycle, improving weed control prior to snap bean planting. To fully realize these benefits, label restrictions on crop rotation may need to be re-evaluated, provided that herbicide residues do not pose a risk to the subsequent snap bean crop.: Lynn Sosnoskie; Good Fit: Given the limited likelihood of new herbicide registrations for specialty crops, reducing plantback restriction intervals becomes essential to enable specialty crop production following agronomic commodities that utilize effective weed management programs: Thierry Besancon

BATTS

VanGessel, M.

P23-DEP02

RECD

Glory FDF (75%) applied broadcast preemergence at 5.3 or 10.6 oz/a (0.248 or 0.497 lb ai/a) to late-season soybeans seeded in a Klej loamy sand, then followed by seeding 'Caprice' snap beans 300 days after treatment. No crop injury, no significant stand reductions and no negative impact on yields seen from metribuzin treatments.



Weed Science	Date:	9/2/2025

BATTS	Vollmer, Kurt (MD)	P23-MDP01	RECD	Glory FDF (75%) applied broadcast preemergence at 5.0 or 10 oz/a (0.234 or 0.47 lb ai/a) to late-season soybeans seeded in a silt loam, then followed by seeding 'Lewis' snap beans 346 days after treatment. No crop injury, no significant stand reduction and no vine length reductions seen through 42 days after snap bean planting.
BATTS	Culpepper, A. Stanley	P23-GAP03	RECD	Glory FDF (75%) applied broadcast preemrgence at 5.33 or 10.66 oz/a (0.25 or 0.5 lb ai/a) to late-season soybeans seeded in a loamy sand, then followed by seeding 'Valentino' snap beans 276 days after treatment. Snap bean injury observed only from high rate, peaking at 16% when evaluated 7 days after planting (DAP) but dissipating by 42 DAP. Snap bean vigor was also reduced by high rate 7, 15 and 30 DAP. Metribuzin did not reduce plant stand, regardless of rate.
BATTS	Performance Summary	P24-HQ-SUM	RECD	SUMMARY OF IR-4 PRODUCT PERFORMANCE PREPARED BY RBB. INCLUDES DATA FROM FT ID#s 23-DEP02, 23-MDP01, and 23-GAP03. FORWARDED TO REGISTRANTS:12/24



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13367 \*

SULFENTRAZONE (FMC)

\* BEAN (SNAP) (06-22A=EDIBLE PODDED BEAN SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

CURRENTLY THE LABEL DOES NOT ALLOW FOR ROTATING TO SNAPBEANS THE FOLLOWING SEASON. BEING ABLE TO USE SULFENTRAZONE IN ROTATIONAL CROPS WILL ALLOW FOR A MORE DIVERSE HERBICIDE ROTATION OVER A 2-YR PERIOD. IT WILL ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SNAPBEANS AND IMPROVE OVERALL CONTROL.

**REQ STATES** DE OH

**NorthEast Region** 

Α

**NorthCentral Region** 

Α

Southern Region

**Western Region** 

**Reduced Risk** 

### **PCR Use Pattern:**

SPARTAN 4L, APPLY AT 6 TO 12 FL OZ TO SOIL FOR SOYBEAN, WITH 1 APPLICATION. APPLY WITH THE EXISTING LABEL REQUIREMENTS. MAY NOT BE COMPATIBLE WITH LATE PLANTED SOYBEAN.

## **HQ Comments:**

EPA GREEN 08/22

### **Nomination Justification:**

(2022 MD) see database comments.;(2022 MI) same;(2023 MI) See Prev;(2023 MD) Could likely include other requested crops in the protocol;(2024 MD) see previous;(2024 NJ) Few herbicides available for use in snap beans for weed control; greater flexibility in use patterns would help improve weed control, which can impact yield and harvestability;(2025 MD) see previous comments;(2025 MI) See Prev;(2025 NJ) Specialty crops with limited herbicide options require systems-based weed management that suppresses weed populations in preceding crop years to reduce pressure on the vulnerable crop. However, herbicide plantback restrictions—ranging from 4 to 18+ months—significantly limit effective crop rotations by constraining herbicide selections in rotational crops. This forces growers to use suboptimal weed control in preceding agronomic crops, undermining the multi-year suppression strategies that specialty crop systems depend on.;

### **IPM Comments from PCR:**

PER REQUESTER, VERY GOOD FIT. THIS ALLOWS FOR A MORE DIVERSE HERBICIDE ROTATION OVER 2-YR PERIOD. IS EFFECTIVE ON AMARANTHUS SPECIES TO ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING SNAPBEANS AND IMPROVE OVERALL WEED CONTROL; VERY GOOD FIT: SEE PREV COMMENTS: NER

#### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman; Good Fit: Given the declining likelihood of new herbicide registrations for specialty crops due to high regulatory costs and limited market returns, reducing current plantback restriction intervals becomes essential. Shortening these restrictions—which can extend beyond 18 months—would enable specialty crop growers to follow well-managed agronomic rotations that effectively suppress weed populations and seed banks. This approach leverages the extensive herbicide toolboxes available in commodity crops like corn and soybeans to benefit specialty crop production, compensating for the limited chemical options available in these vulnerable cropping systems.: Thierry Besancon



**Western Region** 

Weed Science Date: 9/2/2025

PROJECT STATUS

PR# CHEMICAL (MFG) COMMODITY (CROP GROUP)

**Southern Region** 

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

LINURON (TKI)

\* BEAN (EDIBLE PODDED & SUCCULENT SHELLED) (06-22AC=EDDIBLE PODDED AND SUCCULENT SHELLED BEAN SUBGROUP)

> **REQ STATES HQ NY**

Reasons for need: NY-Broadleaf weeds in general. Palmer amaranth is expanding its range into NYS. Other amaranth species are widespread. In the absence of resistance, this a.i. could be an effective tool against them:09/24;

NorthCentral Region

**Reduced Risk** 

### **HQ Comments:**

**NorthEast Region** 

13731

This was an initial study under PR# 11772 but due to analytical concerns the study will need to be repeated. Therefore, this new PR# was created and will have to be reprioritized to assure there is still a need:08/23/sb; TKI supports as Researchable, Residue & E/CS Data Needed:07/24/sb; EPA CAUTION:08/24 & 08/25;

#### **Nomination Justification:**

(2023 NY) Pigweeds are a significant concern in snap beans and the other available actives (such as fomesafen) have significant use/rotation restrictions. The evaluation of this product in beans would be valuable to growers with limited options.:(2024 MI) PRODUCT IS EFFECTIVE UNDER HIGH WEED PRESSURE:(2024 NY) Pigweeds are a significant concern in snap beans and the other available actives (such as fomesafen) have significant use/rotation restrictions. The evaluation of this product in beans would be valuable to growers with limited options: (2024 NJ) Few herbicides available for use in snap beans for weed control; greater flexibility in use patterns would help improve weed control, which can impact yield and harvestability. Great tank-mix partner for complementing and improving the weed control spectrum of currently labeled herbicides.:(2025 NY) This request supports the evaluation and potential registration of a herbicide with a unique mode of action for use in snap beans, a crop with limited effective weed control options. Pigweeds remain a major issue in snap beans. Existing options like formesafen have significant use and crop rotation restrictions, reducing flexibility and complicating long-term management. This product would offer valuable utility in fields where few other tools are effective.;(2025 NJ) This registration request aims to introduce a new herbicide mode of action into snap bean weed management programs, targeting deficiencies in current control strategies for this specialty crop. It is important to note that several existing PRE herbicides labeled for bean use in the Mid-Atlantic region are only available through 24(c) special local need registrations (Reflex, Spartan) or carry restrictions on specific bean varieties (Command, Eptam, Pursuit). Pigweed infestations represent persistent management challenges in snap bean production systems. Available herbicides such as fomesafen carry substantial use restrictions and rotational limitations that compromise operational flexibility and hinder long-term weed management planning. Approval of this herbicide would deliver critical control capabilities for production scenarios where existing tools provide inadequate suppression.;

### **IPM Comments from PCR:**

Good Fit; has a unique mkoa from currently used products, so would be helpful to manage weed resistance, alone or in a tank mix (NCR):08/24; NY:VGF:08/24;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: There are few herbicides available for weed control in snap beans. Greater flexibility in use patterns would help improve overall weed control, yield, and harvest efficiency. This product is also viewed as a strong tank-mix partner, enhancing the spectrum of control when used with currently labeled products.: Lynn Sosnoskie; Very Good Fit: Bean producers in New Jersey urgently require innovative weed management solutions, as pigweeds and ragweed consistently rank among the most problematic species threatening legume crop productivity. Incorporating linuron into current herbicide programs would enhance mode-of-action rotation strategies and help reducing the number of herbicide applications by including a strong tank-mix partner to existing residual herbicide options.: Thierry Besancon



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13385 \*

HALAUXIFEN-METHYL+FLORASULAM (CORTEVA)

\* BEAN, LIMA (SUCCULENT & DRIED SHELLED) (06-22CE=SUCCULENT SHELLED, PULSES DRIED SHELLED BEAN, EXCEPT SOYBEAN SUBGROUPS) NEED E/CS DATA ONLY

Reasons for need:

LABEL CURRENTLY DOES NOT ALLOW FOR ROTATING TO LIMA BEANS THE FOLLOWING SEASON; BEING ABLE TO USE THIS PRODUCT IN ROTATIONAL CROPS WILL ALLOW FOR A MORE DIVERSE HERBICIDE ROTATION OVER A 2-YR PERIOD; IT WILL ALLOW FARMERS TO ACHIEVE EFF WEED CONTROL PRIOR TO PLANTING LIMA BEANS & IMPROVE OVERALL CONTROL; NY-Effective weed control in crops with few herbicide options will require the development of systems approaches that support effective weed suppression in preceding years. Current label plantback restrictions may prevent the development of strong crop rotation programs:07/24/sb;

**REQ STATES** DE MD NY NJ

NorthEast Region

No.

NorthCentral Region

**Southern Region** 

**Western Region** 

**Reduced Risk** 

### PCR Use Pattern:

QUELEX AT 0.75 OZ WT APPLIED POSTEMERGENCE IN WHEAT WITH 1 APPLIC; APPLY WITH THE EXISTING LABEL REQUIREMENTS; NOT CERTAIN OF LIMITATIONS HQ Comments:

CORTEVA CONSIDERING USING CONFINED ROTATIONAL DATA TO SUPPORT THESE REQUESTS WITHOUT RESIDUE STUIDES:06/22;

### **Nomination Justification:**

(2022 MD) see database comments. This would fit with lima beans planted after small grain harvest.;(2023 CA) Same;(2023 MD) Could likely include other requested crops in the protocol;(2024 NY) Effective weed control in crops with few herbicide options will require the development of systems approaches that support effective weed suppression in preceding years. Current label plantback restrictions may prevent the development of strong crop rotation programs. If new active ingredients cannot get registered in specialty crops, then we need to be able to take better advantage of weed control success in preceding agronomic commodities.;(2024 MD) see previous;(2024 NJ) Few herbicides available for use in lima beans for weed control; greater flexibility in use patterns would help improve weed control, which can impact yield and harvestability.;(2025 MD) see previous comments;

### **IPM Comments from PCR:**

PER REQUESTER, A VERY GOOD FIT; ALLOWS FOR A MORE DIVERSE HERBICIDE ROTATION OVER 2-YR PERIOD; ALLOWS FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING LIMA BEANS AND IMPROVE OVERALL WEED CONTROL; VGF-WSR; VGF-NER; VGF

### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13383 METRIBUZIN (ADAMA, UPL NA)

\* BEAN, LIMA (SUCCULENT & DRIED SHELLED) (06-22CE=SUCCULENT SHELLED, PULSES DRIED SHELLED BEAN, EXCEPT SOYBEAN SUBGROUPS) UNDER EVALUATION

Reasons for need:

CURRENTLY THE LABEL DOES NOT ALLOW FOR ROTATING TO LIMA BEANS THE FOLLOWING SEASON; BEING ABLE TO USE METRIBUZIN IN ROTATIONAL CROPS WILL ALLOW FOR A MORE DIVERSE HERBICIDE ROTATION OVER A 2-YR PERIOD: IT WILL ALLOW FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO

**REQ STATES** DE MD NY

PLANTING LIMA BEANS AND IMPROVE OVERALL CONTROL

NorthEast Region

A NorthCentral Region

**Southern Region** 

**Western Region** 

**Reduced Risk** 

#### PCR Use Pattern:

METRICOR 75DF, VARIOUS, AT 3-12 OZ WT FOR SOYBEAN WITH 1 APPLIC; APPLYING WITH THE EXISTING LABEL REQUIREMENTS FOR SOYBEAN; MAY NOT BE COMPATIBLE WITH LATE PLANTED SOYBEAN

### **HQ Comments:**

EPA CAUTION: 08/21, 08/23; 2022 workshop docs indicate support was Potential: E/CS before approval for Residue:08/25/sb; E/CS data being collected in multi-crop trials under metribuzin/spinach priority, See PR 13362 E/CS protocol, JPB, 08/23; Status changed from "ECS data ongoing" to "Covered By Another Project". Data is covered under P13362 Metribuzin/Snap Bean 05/24/drs; ADAMA is currently reviewing E/CS data so the status was changed from Cov by Another Project to Under Eval to allow the project to go on nominations while they review:08/25/sb;

#### **Nomination Justification:**

(2022 MD) See database comments. Metribuzin label can go up to 1lb product but on sandy soil we are using significantly less. However, the rotational restrictions do not reflect the amount used. Would be great for more consideration. It can be tough to keep up with a 24c so a goal of federal label changes would be better. some states do not like giving 24c's.;(2025 NY) Bean growers face significant challenges due to limited in-crop herbicide options, making it difficult to adequately suppress weeds, particularly aggressive species like Amaranthus. Metribuzin is a highly effective herbicide used in rotational crops, although significant rotational restrictions exist. Reducing the plantback guidance when used in preceding crops would enable a more diverse and effective two-year herbicide rotation,;(2025 NJ) Crops with limited herbicide options require systems-based weed management approaches that suppress weed populations in preceding years to reduce pressure on the vulnerable crop. However, current herbicide plantback restrictions can prevent effective crop rotation programs by limiting herbicide selections in rotational crops, undermining the multi-year weed suppression strategies these systems depend on.;

### **IPM Comments from PCR:**

PER REQUESTER, A VERY GOOD FIT; ALLOWS FOR A MORE DIVERSE HERBICIDE ROTATION OVER 2-YR PERIOD AND IS EFFECTIVE ON AMARANTHUS SPECIES; ALLOWS FARMERS TO ACHIEVE EFFECTIVE WEED CONTROL PRIOR TO PLANTING LIMA BEANS AND IMPROVE OVERALL WEED CONTROL

### **IPM Comments from Nomination Process:**

; Very Good Fit: Given the limited number of effective in-crop herbicides for beans, integrated pest management strategies must rely heavily on weed suppression achieved in prior seasons. Strong rotational programs using herbicides like metribuzin are essential to reduce the weed seedbank and minimize early-season competition. However, current rotation restrictions limit its use in specialty bean rotations. Reevaluating metribuzin residue data could facilitate label modifications that support broader IPM adoption, reduce dependency on limited chemical tools, and improve long-term weed management in lima bean production.: Lynn Sosnoskie; Good Fit: Given the limited likelihood of new herbicide registrations for specialty crops, reducing plantback restriction intervals becomes essential to enable specialty crop production following agronomic commodities that utilize effective weed management programs.: Thierry Besancon



Weed Science

FIOJECI		7700d 20101100			
Culpepper, A. Stanley	P23-GA-DMP	RECD	Glory FDF (75%) applied broadcast preemrgence at 5.33 or 10.66 oz/a (0.25 or 0.5 lb ai/a) to late-season soybeans seeded in a loamy sand, then followed by seeding 'Jackson Wonder' lima beans 276 days after treatment. Lima bean injury observed only from high rate, peaking at 16% when evaluated 7 days after planting (DAP) but dissipating by 42 DAP. Lima bean vigor was also reduced by high rate 7 and 15 DAP. Metribuzin did not reduce plant stand, regardless of rate.		
Vollmer, Kurt (MD)	P23-MD-DMP	RECD	Glory FDF (75%) applied broadcast preemergence at 5.0 or 10 oz/a (0.234 or 0.47 lb ai/a) to late-season soybeans seeded in a silt loam, then followed by seeding 'Fordhook 242' lima beans 346 days after treatment. No crop injury, no significant stand reduction and no vine length reductions seen through 42 days after lima bean planting.		
VanGessel, M.	P23-DE-DMP	RECD	Glory FDF (75%) applied broadcast preemergence at 5.3 or 10.6 oz/a (0.248 or 0.497 lb ai/a) to late-season soybeans seeded in a Klej loamy sand, then followed by seeding 'Cypress' lima beans 300 days after treatment. Little to no crop injury, no significant stand reductions and no negative impact on yields seen from metribuzin treatments.		
Performance Summary	P24-HQ-SUM	RECD	SUMMARY OF IR-4 PRODUCT PERFORMANCE PREPARED BY RBB. INCLUDES DATA FROM FT ID#s 23-DEP-DMP, 23-MD-DMP, and 23-GA-DMP. FORWARDED TO REGISTRANTS:12/24		

Date: 9/2/2025



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14051 2,4-DB (ACETO,ALBAGH)

\* BEAN (DRIED SHELLED) (06-22E=PULSES, DRIED SHELLED BEAN, EXCEPT SOYBEAN, SUBGROUP)

UNDER EVALUATION

Reasons for need: weed control. limited materials available for weed control in blackeye peas:07/25;

REQ STATES

CA

NorthEast Region

NorthCentral Region

Southern Region

Western Region A

**Reduced Risk** 

### **PCR Use Pattern:**

After label review and further input from stakeholders, IR-4 suggests two possible use patterns. 1. Make one postemergence directed application of Butyrac 200 at 0.7 to 1.6 pt/a to small weeds in row middles of emerged dry beans that are at least 8" tall, ensuring that spray solution only contacts lower 1/3 of the crop plants. See Butyrac 200 label for guidance on targeted weed sizes. 2. Make one broadcast postemergence application at 0.7 to 0.9 pt/a. Apply only when crop is between 7-10 days prior to bloom and mid-bloom stage. See Butyrac 200 label for targeted weed sizes.

### **HQ Comments:**

Requester interest is blackeye peas. EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; weed control in blackeye peas:07/25;

Long, Rachael

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold

P21-CA-DMP

RECD

Two trials conducted. Butyrac 200 applied EPOST to 4-7 true leaf 'CB5' blackeye pea at 14 fl oz/a. High crop injury 28 days after application (>70%). Yield not different from weed-free



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

14050 METAMITRON (ADAMA, BAYER)

\* BEAN (DRIED SHELLED) (06-22E=PULSES, DRIED SHELLED BEAN, EXCEPT SOYBEAN, SUBGROUP)

**UNDER EVALUATION** 

Reasons for need: weed control. limited materials available for weed control in blackeye peas:07/25;

**REQ STATES** 

CA

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region A

Reduced Risk

# **PCR Use Pattern:**

After label review and further input from stakeholders, IR-4 suggests: Make one broadcast application of metamitron at 1.03 lb ai/a after seeding but before dry bean emergence.

# **HQ Comments:**

Requester interest is blackeye peas. EPA CAUTION:08/25;

Α

#### **Nomination Justification:**

(2025 CA) same; (2025 NY) It could be a valuable tool for controlling pigweed species. However, due to the lack of safety data in the database under PR 14050, it might be best incorporated into IS00520 as part of a broader safety screening program. Trials are underway to screen metamitron for safety across multiple bean crops (PRE and POST) (As of August 2025); (2025 NJ) Metamitron represents a promising pre-emergence control option for managing problematic pigweed species as well as ragweed, which have developed increasing resistance to ALS-inhibiting or PPO herbicides in the region. This herbicide would provide a valuable addition to the modes of action currently available for bean production systems. It is important to note that several existing PRE herbicides labeled for bean use in the Mid-Atlantic region are only available through 24(c) special local need registrations (Reflex, Spartan) or carry restrictions on specific bean varieties (Command, Eptam, Pursuit).

Ongoing research efforts are evaluating metamitron's crop safety across multiple bean cultivars through field trials examining both pre-emergence and post-emergence application timings. These studies, initiated in New Jersey during 2025, will generate critical comparative data for developing appropriate application guidelines and identifying potential phytotoxicity risks within legume production systems. However, current safety data gaps in the PR 14050 database indicate that metamitron would be better suited for evaluation within the IS00520 research framework. This integration would allow for comprehensive crop safety assessment as part of a broader multi-herbicide screening program, ensuring more thorough risk evaluation before potential registration.:

#### **IPM Comments from PCR:**

Per Requester: Very Good Fit; 07/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Very Good Fit: A novel active ingredient is needed for pigweed control because New York growers consistently rank pigweeds among the most troublesome weeds in legume crops. Existing herbicides often provide inconsistent control or impose restrictions on crop rotation.: Lynn Sosnoskie; Very Good Fit: Bean producers in New Jersey urgently require innovative weed management solutions, as pigweeds and ragweed consistently rank among the most problematic species threatening legume crop productivity. Incorporating metamitron into current herbicide programs would enhance mode-of-action rotation strategies while potentially reducing crop rotation limitations that growers currently face.: Thierry Besancon



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

COMMODITY (CROP GROUP)

PROJECT STATUS

14052 PYRAFLUFEN-ETHYL (NAI)

Α

\* BEAN (DRIED SHELLED) (06-22E=PULSES, DRIED SHELLED BEAN, EXCEPT SOYBEAN, SUBGROUP)

**UNDER EVALUATION** 

Reasons for need: weed control. limited materials available for weed control in blackeye peas:07/25;

REQ STATES

CA

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region A

Reduced Risk

# **PCR Use Pattern:**

After label review and further input from stakeholders, IR-4 suggests two possible use patterns. 1. Make up to four applications of ET at 0.5 to 2.0 fl oz/a to small weeds in row middles of emerged dry beans. Sequential applications will be at least 30 days apart and should not exceed a total of 2.0 fl oz/a per cropping season. Do not allow spray solution to contact the crop. Applications will be made with a hooded/shielded sprayer. See ET label for guidance on adjuvant and targeted weed sizes. 2. Make up to two broadcast postemergence applications at 0.5 to 0.75 fl oz/a between crop emergence and V6 crop stage. Applications should be at least 30 days apart and shall not exceed 1.0 fl oz/a per season. Do not use crop oils or crop oil concentrates for postemergence applications. See ET label for targeted weed sizes.

# **HQ Comments:**

Requester interest is blackeye peas. Preplant burndown use is already registered.

### **Nomination Justification:**

(2025 CA) same;(2025 NY) Effective herbicide options for weed control in dried beans, especially for use in row middles, remain limited. Weed pressure in these areas can lead to significant yield losses and complicate harvest operations, particularly in no-till or reduced-tillage systems. Many existing herbicides lack the broad spectrum of activity, crop safety, or resistance management benefits needed for these production systems. Conducting IR-4 field trials to evaluate new active ingredients will help broaden the available chemical tools and better meet regional grower needs. However, given the current lack of crop safety data under the existing project request, it may be more appropriate to include this material in IS00520 as part of a larger safety screening initiative.;

## **IPM Comments from PCR:**

Per Requester: Very Good Fit; weed control in blackeye peas:07/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Very Good Fit: Incorporating herbicides with novel or less commonly used modes of action enhances integrated weed management by tackling herbicide resistance and increasing control options in row middle applications. These products also promote reduced tillage practices and facilitate targeted weed control without direct crop exposure, supporting more sustainable and effective weed management strategies.: Lynn Sosnoskie



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14054 PYRIDATE (BELCHIM)

\* BEAN (DRIED SHELLED) (06-22E=PULSES, DRIED SHELLED BEAN, EXCEPT SOYBEAN, SUBGROUP)

**UNDER EVALUATION** 

Reasons for need: weed control. limited materials are available for weed control in blackeye peas:07/25;

REQ STATES

CA

NorthEast Region

A NorthCentral Region

**Southern Region** 

Western Region A

**Reduced Risk** 

#### **PCR Use Pattern:**

After further input from stakeholders, reviewing previous IR-4 protocols, and product label, IR-4 suggests two possible use patterns. 1. Make up to three applications of Tough 5EC at 8 to 24 fl oz/a to small weeds in row middles of emerged dry beans. Sequential applications will be at least 7 days apart and should not exceed a total of 24 fl oz/a per cropping season. Do not allow spray solution to contact the crop. Applications will be made with a hooded/shielded sprayer. See Tough 5EC label for guidance on adjuvant and targeted weed sizes. 2. Make up to two broadcast postemergence applications of Tough 5EC at 12 to 24 fl oz/a. Do not exceed 24 fl oz/a per cropping season and do not apply within 60 days of harvest. Sequential applications will be at least 7 days apart. See Tough 5 EC label for targeted weed sizes.

#### **HQ Comments:**

Requester interest is blackeye peas.

### **Nomination Justification:**

(2025 CA) same; (2025 NY) Effective herbicide options for weed control in dried beans, especially for use in row middles, remain limited. Weed pressure in these areas can lead to significant yield losses and complicate harvest operations, particularly in no-till or reduced-tillage systems. Many existing herbicides lack the broad spectrum of activity, crop safety, or resistance management benefits needed for these production systems. Conducting IR-4 field trials to evaluate new active ingredients will help broaden the available chemical tools and better meet regional grower needs. However, given the current lack of crop safety data under the existing project request, it may be more appropriate to include this material in IS00520 as part of a larger safety screening initiative.;(2025 NJ) Dried bean producers face limited herbicide options for row middle weed control, leading to yield losses and harvest complications in conservation tillage systems. Existing herbicides often lack adequate spectrum, crop safety, or resistance management capabilities. While IR-4 trials of new active ingredients could expand available tools to meet grower needs, insufficient safety data suggests incorporating this material into the IS00520 screening program rather than proceeding under the current project framework.:

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; weed control for blackeye peas:07/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Very Good Fit: Incorporating herbicides with novel or less commonly used modes of action enhances integrated weed management by tackling herbicide resistance and increasing control options in row middle applications. These products also promote reduced tillage practices and facilitate targeted weed control without direct crop exposure, supporting more sustainable and effective weed management strategies.: Lynn Sosnoskie; Good Fit: The addition of pyridate to dried bean weed management systems would provide an additional mode of action that will help manage and mitigate existing herbicide resistance. This approach perfectly aligns with integrated weed management strategies by reducing reliance on a single mode of action: Thierry Besancon

Long, Rachael

P21-CA-DMP

RECD

Two trials conducted. Tough 5EC applied EPOST to 4-7 true leaf 'CB5' blackeye pea at 10 fl oz/a. Noticeable, transient early crop injury but was <5% 28 days after application. Yield not different from weed-free.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

COMMODITY (CROP GROUP)

PROJECT STATUS

14053 SAFLUFENACIL (BASF)

Α

\* BEAN (DRIED SHELLED) (06-22E=PULSES, DRIED SHELLED BEAN, EXCEPT SOYBEAN, SUBGROUP)

**UNDER EVALUATION** 

Reasons for need: weed control. limited materials available for weed control in blackeye peas:07/25;

REQ STATES

CA

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region A

Reduced Risk

Yes

#### **PCR Use Pattern:**

IR-4 suggests: Make up to two applications of Sharpen at 1 or 2 fl oz/a to small weeds in row middles of emerged dry beans. Sequential applications will be at least 14 days apart and should not exceed 4 fl oz/a per cropping season. Do not allow spray solution to contact the crop. Applications will be made with a hooded/shielded sprayer. See Sharpen label for guidance on adjuvant and targeted weed sizes.

#### **HQ Comments:**

Requester interest is blackeye peas.

### **Nomination Justification:**

(2025 CA) same;(2025 NY) Effective herbicide options for weed control in dried beans, especially for use in row middles, remain limited. Weed pressure in these areas can lead to significant yield losses and complicate harvest operations, particularly in no-till or reduced-tillage systems. Many existing herbicides lack the broad spectrum of activity, crop safety, or resistance management benefits needed for these production systems. Conducting IR-4 field trials to evaluate new active ingredients will help broaden the available chemical tools and better meet regional grower needs. However, given the current lack of crop safety data under the existing project request, it may be more appropriate to include this material in IS00520 as part of a larger safety screening initiative.;(2025 NJ) See previous comments from NY;

#### **IPM Comments from PCR:**

Per Requester: Very Good Fit: weed control in blackeye peas:07/25:

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Very Good Fit: Incorporating herbicides with novel or less commonly used modes of action enhances integrated weed management by tackling herbicide resistance and increasing control options in row middle applications. These products also promote reduced tillage practices and facilitate targeted weed control without direct crop exposure, supporting more sustainable and effective weed management strategies.: Lynn Sosnoskie; Very Good Fit: The addition of saflufenacil to dried beans weed management systems provides an additional mode of action that will help manage and mitigate herbicide resistance. This approach perfectly aligns with integrated weed management strategies by reducing reliance on a single mode of action: Thierry Besancon



Weed Science Date: 9/2/2025

PR# 14055 \* CHEMICAL (MFG)

TIAFENACIL (ISK)

COMMODITY (CROP GROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

\* BEAN (DRIED SHELLED) (06-22E=PULSES, DRIED SHELLED BEAN, EXCEPT SOYBEAN, SUBGROUP)

RESIDUE STUDY

PROJECT STATUS

DEO STATES CA

Reasons for need:

weed control. limited options in weed control in blackeye pea production:07/25;

REQ STATES CA

NorthEast Region

Α

**NorthCentral Region** 

**Southern Region** 

Western Region

Α

**Reduced Risk** 

#### PCR Use Pattern:

After label review and further input from stakeholders, IR-4 suggests: Make up to three applications of Reviton at 1 or 2 fl oz/a to small weeds in row middles of emerged dry beans. Sequential applications will be at least 14 days apart and should not exceed 6 fl oz/a per cropping season. Do not allow spray solution to contact the crop. Applications will be made with a hooded/shielded sprayer. See Reviton label for guidance on adjuvant and targeted weed sizes.

#### **HQ Comments:**

Requester interest is blackeye peas. ISK supports as researchable, "potential: E/CS Data Before Approval for Residue":07/25/sb;

#### **Nomination Justification:**

(2025 CA) same; (2025 NY) There are limited effective herbicide options available for weed control in dried beans particularly for use in row middles. Weed pressure can significantly reduce yield and complicate harvest, especially in no-till or reduced-tillage systems. Current tools often lack the necessary spectrum of activity, crop safety, or resistance management value. Evaluating new active ingredients through IR-4 field trials will help expand the chemical toolbox and address regionally identified grower needs. However, due to the lack of crop safety data in the database under the current PR, it might be best incorporated into IS00520 as part of a broader safety screening program.; (2025 NJ) Dried bean producers face limited herbicide options for row middle weed control, leading to yield losses and harvest complications in conservation tillage systems. Existing herbicides often lack adequate spectrum, crop safety, or resistance management capabilities. While IR-4 trials of new active ingredients could expand available tools to meet grower needs, insufficient safety data suggests incorporating this material into the IS00520 screening program rather than proceeding under the current project framework.:

# **IPM Comments from PCR:**

Per Requester: Very Good Fit; Weed control:07/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Very Good Fit: The inclusion of herbicides with novel or underutilized modes of action supports integrated weed management by addressing weed resistance issues and improving control diversity in row middle applications. These options also support reduced tillage practices and enable targeted weed control strategies without direct crop contact.: Lynn Sosnoskie; Very Good Fit: The addition of tiafenacil to dried bean weed management systems would provide an additional mode of action that will help manage and mitigate existing herbicide resistance. This approach perfectly aligns with integrated weed management strategies by reducing reliance on a single mode of action: Thierry Besancon



Weed Science Date: 9/2/2025

PR#
14049 \*

CHEMICAL (MFG)

TOLPYRALATE (ISK)

**COMMODITY (CROP GROUP)** 

\* BEAN (DRIED SHELLED) (06-22E=PULSES, DRIED SHELLED BEAN, EXCEPT SOYBEAN, SUBGROUP)

**PROJECT STATUS** 

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need: weed control. limited materials available for weed control in blackeye peas:07/25;

**REQ STATES** 

CA

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

**Reduced Risk** 

# **PCR Use Pattern:**

After label review and further input from stakeholders, IR-4 suggests: Make one broadcast application of Shieldex 400 at 1.0 to 1.35 fl oz/a to emerged weeds present after seeding dry bean but prior to bean emergence.

# **HQ Comments:**

Requester interest is blackeye peas. ISK supports as Potential, E/CS before approval for Residue:07/25/sb;

# **Nomination Justification:**

(2025 CA) same;

# **IPM Comments from PCR:**

Per Requester: Very Good Fit; weed control:07/25;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

COMMODITY (CROP GROUP)

PROJECT STATUS

13883 LINURON (TKI)

\* PEA (DRY) (06-22F=PULSES, DRIED SHELLED PEA SUBGROUP)

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

Reasons for need:

Lambsquarter Broad leaf weeds. Fall seeded dry peas provide an additional crop for traditional dry land farming. The use of Lorox would provide much needed weed control for this important crop and make it viable in crop rotation. Adds a legume to typical wheat/fallow rotations for over 12 Million acres of dryland acres:07/24; NY: Lorox is a strong fit for peas, adding weed control and supporting rotation. In NY, pigweeds are significant problem and this ai would develop and diversify control programs:08/25;

REQ STATES ID NY

NorthEast Region

A NorthCentral Region

**Southern Region** 

Western Region

Α

**Reduced Risk** 

#### **PCR Use Pattern:**

Use the Lorox DF product at 1 lb ai/a. Make one broadcast foliar application in the spring over fall-seeded peas and common lambsquarters that do not exceed 6" in height. Application should not be made within 30 days of pea harvest.

# **HQ Comments:**

Key Export: South America, China, India, SE Asia. This request is for a postemergence foliar application and is different from PR 09651. Unsure, but might be phytotoxic. Lorox is labeled only for preemergence use in other legume crops, soybean and edamame (vegetable soybean). However, some crops are tolerant to linuron and labeled for over the top application (corn, sorghum, carrot, dill, coriander/cilantro, parsley-muck soils):08/24/sb; TKI supports as Researchable, Residue & E/CS Data Needed:08/24/sb; EPA CAUTION:08/25;

#### **Nomination Justification:**

(2024 NY) Pigweeds are a significant problem in NY bean crops. Palmer amaranth is also invading NYS and linuron has been effective at controlling the species in Cornell greenhouse trials. Effective tools are needed to manage current and future pigweed problems.;(2024 CA) same as above;(2024 NJ) Few herbicides available for use in peas for weed control; greater flexibility in use patterns would help improve weed control, which can impact yield and harvestability;(2025 CA) same;(2025 NY) It could be a valuable tool for control of Pigweed species. Because of the lack of safety data in database under PR 13883, this would be best incorporated into IS00520 as part of a larger safety screen.;(2025 NJ) Bean production in New Jersey faces substantial challenges from pigweed species, including rapidly spreading populations of Palmer amaranth. Linuron is effective for pigweed control as well as common Imbsquarters, galinsoga and purslane. This PR 3 could also be incorporated as part of the large herbicide screening proposed in IS00520.;

#### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Fall seeded dry peas provide an additional crop for traditional dry land farming. The use of Lorox would provide much needed weed control for this important crop and make it viable in crop rotation. Adds a legume to typical wheat/fallow rotations for over 12 Million acres of dryland acres; VGF-WSR:08/24; NJ:GF-good fit: new moa needed for reducing selection pressure of herbicide-resistant weed biotypes, especially in crops with limited registered moa:08/24;

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Very Good Fit: A novel active ingredient is needed for pigweed control because New York growers consistently rank pigweeds among the most troublesome weeds in legume crops. Some existing herbicides provide inadequate or inconsistent control while others limit rotation opportunities.: Lynn Sosnoskie; Very Good Fit: The addition of linuron to dried bean weed management systems would provide an additional mode of action that will help manage and mitigate existing herbicide resistance. This approach perfectly aligns with integrated weed management strategies by reducing reliance on a single mode of action.: Thierry Besancon



Weed Science Date: 9/2/2025

PR#

**CHEMICAL (MFG)** 

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13918 \*

TOPRAMEZONE (BASF)

\* PEA (DRY) (06-22F=PULSES, DRIED SHELLED PEA SUBGROUP) POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

Broadleaf weeds, especially kochia. Data from field trials indicate good efficacy against small kochia. There is no residual impact in soil. A single application should be sufficient. We intend to always tank mix the product with another mode of action for product stewardship:10/24; NM: Researchers are trying to establish chickpea production in NM, and this would provide a needed tool for producers to control for kochia:08/25:

**REQ STATES** 

ND NM

**NorthEast Region** 

**NorthCentral Region** 

Southern Region

Western Region

Α

Reduced Risk

# **PCR Use Pattern:**

Make one broadcast application of Armezon at 0.25 to 0.5 fl oz/a to emerged weeds just prior to seeding dry pea or just after seeding and prior to emergence

# **HQ Comments:**

XH690 converted to this PR# with PCR Submission; Key Export Markets: India, China, Spain & others; BASF approves as Potential, ECS before residue. Only crop safety data is needed 05/25/ds:

# **Nomination Justification:**

(2025 CA) same; (2025 MI) See Prev;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Data from field trials indicate good efficacy against small kochia. We have not observed crop injury from soil residual. A single application should be sufficient. We intend to always tank mix the product with another mode of action for product stewardship:10/24;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold

Jenks, Dr. Brian P24-ND-DMP

RECD

Armezon applied at 0.25 or 0.5 fl oz/a (0.005 or 0.01 lb ai/a) tank-mixed with bromoxynil, or the low rate mixed with bromoxynil + sulfentrazone, or with bentazon broadcast reemergence one day after planting (DAP) dry peas. No crop injury seen when mixed with bromoxynil or bentazon through 56 DAP. The inclusion of sulfentrazone resulted in 13% injury at 56 DAP. Kochia control was variable through 30 DAP, depending on tank-mix partner, but shepard's purse control was excellent at 21 DAP with all topramezone treatments.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13822 DIMETHENAMID-P (BASF)

В

\* PEPPER (BELL & NONBELL) (08-10BC=PEPPER/NON-BELL PEPPER/EGGPLANT SUBGROUPS)

UNDER EVALUATION

Reasons for need:

sedges and annual weeds. alternative to current s-metolachlor:06/24; TX-Sedges and other annual weeds like purslane, lambsquarter & amaranths are a significant problem in bell pepper production in the Texas Winter Garden area. Producers would value having additional tools to control these and other weeds:08/24;

REQ STATES NM TX

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

Reduced Risk

# **PCR Use Pattern:**

Make one pre-transplant broadcast or 2 post transplant row middle applications of Outlook at 21 fl oz/a. Sequential applications must be at least 14 days apart and no application should be made within 30 days of pepper harvest.

# **HQ Comments:**

Not considered a duplicate of PR# 08712 due to diff use pattern (this request includes row middle applications, which would crate spatial selectivity). Likely an export commodity but not defined. There is one rpt under 08712 x-ref added to this pr#. Previous Canada data showed good safety applied pretransplant. Previous California data showed variable response applied over transplants immediately after planting (not included in this request, however). The current Outlook label claims control of select sedge species (rice flatsedge and yellow nutsedge) along with a large list of annual grasses and broadleaf weeds:06/24/sb; EPA HOLD CAUTION:08/24/sb; project rec'd A nominations at the 2024 workshop but could not select as a priority since status is still Under Eval - priority updated from X to B:09/24/sb; EPA CAUTION:08/25;

#### **Nomination Justification:**

(2024 FL) See previous comments.;(2024 CA) same as above;(2025 CA) same;(2025 NJ) Additional herbicide tools that can be effective against common purslane, common lambsquarters, pigweed species, and yellow nutsedge are needed in NJ for row middle weed management.;

#### **IPM Comments from PCR:**

Per Requester: Very Good Fit; resistant amaranth to s-metolachlor found not to be cross-resistant to dimethenamid-p. would be useful in an herbicide rotation; VGF-SOR & WSR:08/24;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Very Good Fit: The addition of dimethenamid-P to bell pepper weed management systems would provide an additional mode of action to help manage and mitigate herbicide resistance. This approach aligns well with integrated weed management strategies by reducing reliance on single modes of action and diversifying chemical control options.: Thierry Besancon

Brandenberger, L.

P15-OK-DMP

RECD

1.0 LB AI/A PRE-TP; EXCELLENT CROP TOLERANCE.



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

COMMODITY (CROP GROUP)

PROJECT STATUS

11776

ETHALFLURALIN + CLOMAZONE (GOWAN,LOVLND)

\* CANTALOUPE (09A=MELON SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need: MORNING GLORY, PIGWEED, NUTSEDGE

**REQ STATES** 

LA SC KY NC UT MS DE NJ MD IN NY OH

NorthEast Region

Α

NorthCentral Region

**Southern Region** 

Western Region

**Reduced Risk** 

### **PCR Use Pattern:**

MAKE 1 SOIL APPLIC OF 5 PT/A OF STRATEGY, AFTER TRANSPLANTING

#### **HQ Comments:**

THIS IS A NEW REQUEST FOR THE COMBO PRODUCT STRATEGY ON CUCURBIT CROPS AS A PRE-EMERGENCE BROADLEAF TOOL IN TRANSPLANTED FIELDS (MOST CUCURBIT CROPS ARE NOW TRANSPLANTED); STRATEGY IS LABELED FOR BROADCAST PRE USE IN SEEDED CUCURBITS ONLY; FOR TRANSPLANTED CUCURBITS IT CAN ONLY BE USED POST-TRANSPLANT AND ONLY IN ROW MIDDLES; ETHAFLURALIN IS LABELED AS CURBIT EC BY LOVELAND, AND HAS THE SAME LABEL LANGUAGE AS STRATEGY:08/15; CLOMAZONE IS LABELED AS COMMAND 3 ME AND ALLOWS PRE TRANSPLANT USE IN WINTER/SUMMER SQUASH ONLY (NOT ALL CUCURBITS); IT ALSO IS EPA OK/GREEN FOR THIS MICROENCAPSULATED FORMULATION, WHILE ETHAFLURALIN IS EPA CAUTION; SEE ONGOING CLOMAZONE/CUCURBIT STUDY (PR# 11063), DESIGNED TO REDUCE PHI TO 30 DAYS, AND IT DOES ALLOW FOR PRE TRANSPLANT USE; DOW IS NOT INTERESTED IN SUPPORTING ADDITIONAL WORK WITH ETHAFLURALIN FOR THIS USE AT THIS TIME:09/15; THIS IS A LOVELAND DUAL AI PRODUCT:07/17; GOWAN CONFIRMED LOVELAND HOLDS THE DATA FOR THIS PRODUCT, AND GOWAN WILL SUPPORT IT IF LOVELAND DOES:08/18; EPA CAUTION:09/18; BOTH AIS HAVE TOLERANCES FOR CROP GROUP 9 CUCURBITS:10/18; NEED TO DISCUSS WITH LOVELAND:06/19; EPA GREEN (BOTH): 09/19; THIS IS A LOVELAND PRODUCT SO IT IS THEIR DECISION:05/20; EPA GREEN (BOTH): 08/20; EPA YELLOW (ETHALFLURALIN), EPA GREEN (CLOMAZONE): 08/21; EPA ORANGE (ETHALFLURALIN: 08/22; CHANGED FROM CROP GROUP 9 TO CANTALOUPE, SEE 13528, AND 13529 FOR REST OF THE CROP GROUP: 09/22; PR#11776 ORIGINALLY WAS SUBMITTED UNDER THE CROP "CUCURBIT VEGETABLES". THAT REQUEST WAS BROKEN INTO 3 SEPARATE REQUESTS AS CANTALOPE, PR#13528 (CUCUMBER) & PR#13529 (SQUASH); FMC needs E/CS data before deciding on residue study: 5/23 JPB;;EPA HOLD CAUTION: 08/23 (ETHALFLURALIN), CLOMAZONE GREEN 08/23

## **Nomination Justification:**



Weed Science Date: 9/2/2025

(2016 DE) Many growers are switching to transplanted production.;(2016 MD) Growers are relying more on transplants than direct seeding. This would help reduce the need for applying multiple herbicides throughout a growing season.;(2016 FL) Strong interest in this request from the SR.;(2017 FL) I reviewed the labels for the request for Strategy (ethalfluralin plus clomazone) herbicide post transplant between rows in transplanted cucurbit vegetables. It looks to me that this request may already be covered on the Strategy herbicide label (see attached). What is not covered is if a grower would like to tank mix Curbit (ethalfluralin) plus Command (clomazone) and apply it after transplanting in these crops. The current Curbit label requires that Curbit be applied after transplanting and in contrast the Command label requires it be applied prior to transplanting. If both were registered to apply after transplanting then it would allow for 1 trip to apply both herbicides instead of 2 trips across the field. In addition, the time period between applying Command prior to transplanting and applying Curbit after transplanting could allow weeds to escape. Growers applying exactly the rate of each herbicide needed appears to be advantageous in some cases over the formulated mixture. It is my understanding that some growers add extra Curbit to the Strategy spray solution to better control weeds mostly when Strategy application rate is low.-D. Monks, NC;(2018 FL) MORNING GLORY, PIGWEED, NUTSEDGE; ONLY ONE APPLICATION NEEDED FOR CONTROL

:(2018 MD) DE: This would be a valuable label. Would recommend going for a crop grouping so all are covered. Does Squash include winter squashes as well as summer squash. If winter squash is included, jack-o-lantern type should also be included in the request. In order of importance: 1 = squash, 2 = cucumber and 3 = cantaloupe. (2016 DE) Many growers are switching to transplanted production.;(2016 MD) Growers are relying more on transplants than direct seeding. This would help reduce the need for applying multiple herbicides throughout a growing season; (2019 FL) MORNING GLORY, PIGWEED, NUTSEDGE CONTROL; WOULD REDUCE THE NUMBER OF APPLICATIONS NEEDED AND ALLOW FOR APPLICATION BETWEEN ROWS AFTER TRANSPLANT; (2019 MD) NJ has data. need PCRs for rep crops.; (2020 MI) (2016 DE) Many growers are switching to transplanted production.; (2016 MD) Growers are relying more on transplants than direct seeding. This would help reduce the need for applying multiple herbicides throughout a growing season.: (2016 FL) Strong interest in this request from the SR.;(2017 FL) I reviewed the labels for the request for Strategy (ethalfluralin plus clomazone) herbicide post transplant between rows in transplanted cucurbit vegetables. It looks to me that this request may already be covered on the Strategy herbicide label (see attached). What is not covered is if a grower would like to tank mix Curbit (ethalfluralin) plus Command (clomazone) and apply it after transplanting in these crops. The current Curbit label requires that Curbit be applied after transplanting and in contrast the Command label requires it be applied prior to transplanting. If both were registered to apply after transplanting then it would allow for 1 trip to apply both herbicides instead of 2 trips across the field. 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This would help reduce the need for applying multiple herbicides throughout a growing season;(2019 FL) MORNING GLORY, PIGWEED, NUTSEDGE CONTROL; WOULD REDUCE THE NUMBER OF APPLICATIONS NEEDED AND ALLOW FOR APPLICATION BETWEEN ROWS AFTER TRANSPLANT; (2019 MD) NJ has data. need PCRs for rep crops.;; (2021 MD) see previous comments; (2021 MI) (2016 DE) Many growers are switching to transplanted production.;(2016 MD) Growers are relying more on transplants than direct seeding. This would help reduce the need for applying multiple herbicides throughout a growing season.;(2016 FL) Strong interest in this request from the SR.:(2017 FL) I reviewed the labels for the request for Strategy (ethalfluralin plus clomazone) herbicide post transplant between rows in transplanted cucurbit vegetables. It looks to me that this request may already be covered on the Strategy herbicide label (see attached). What is not covered is if a grower would like to tank mix Curbit (ethalfluralin) plus Command (clomazone) and apply it after transplanting in these crops. The current Curbit label requires that Curbit be applied after transplanting and in contrast the Command label requires it be applied prior to transplanting. If both were registered to apply after transplanting then it would allow for 1 trip to apply both herbicides instead of 2 trips across the field. In addition, the time period between applying Command prior to transplanting and applying Curbit after transplanting could allow weeds to escape. Growers applying exactly the rate of each herbicide needed appears to be advantageous in some cases over the formulated mixture. It is my understanding that some growers add extra Curbit to the Strategy spray solution to better control weeds mostly when Strategy application rate is low.-D. Monks, NC;(2018 FL) MORNING GLORY, PIGWEED, NUTSEDGE; ONLY ONE APPLICATION NEEDED FOR CONTROL ;(2018 MD) DE: This would be a valuable label. Would recommend going for a crop grouping so all are covered. Does Squash include winter squashes as well as summer squash. If winter squash is included, jack-o-lantern type should also be included in the request. In order of importance: 1 = squash, 2 = cucumber and 3 = cantaloupe. (2016 DE) Many growers are switching to transplanted production.;(2016 MD) Growers are relying more on transplants than direct seeding. This would help reduce the need for applying multiple herbicides throughout a growing season; (2019 FL) MORNING GLORY, PIGWEED, NUTSEDGE CONTROL; WOULD REDUCE THE NUMBER OF APPLICATIONS NEEDED AND ALLOW FOR APPLICATION BETWEEN ROWS AFTER TRANSPLANT; (2019 MD) NJ has data. need PCRs for rep crops.; (2020 MI) (2016 DE) Many growers are switching to transplanted production.;(2016 MD) Growers are relying more on transplants than direct seeding. This would help reduce the need for applying;(2022 MI) same;(2022 MD) see database comments;(2023 MD) seed at a comment of the commen MI) See Prev;(2023 MD) See previous comments;(2023 NY) See previous comments.;(2024 MI) See Prev;(2024 NY) Not sure that I can add anything that hasn't already been stated in previous comments.;(2024 MD) see previous;(2024 NJ) See previous comments for this use; much needed for all transplanted cucurbits;(2025 MD) see previous comments;(2025 NY) Many growers are switching from direct seeding to transplanted production in cucurbits. This shift has created a strong demand for herbicide options that can be applied post-transplant,



Weed Science Date: 9/2/2025

ideally between rows, to control key weeds such as pigweed, morning glory, and nutsedge. Current labels often require multiple trips or sequential applications of different herbicides due to conflicting application timing, which can allow weeds to escape and increase labor and input costs.;(2025 NJ) Key herbicide for controlling small seeded broadleaf weeds, especially pigweeds. 2025 NJ trials with OTT application on bareground transplanted squash and cucumber (IR4) showed excellent crop safety at the 1X and 2X rates without any yield losses; effective for control of pigweeds, lambsquarters and morningglory. Definitely a need for assessing cantaloupe to the premix. Cucurbit tolerance may fluctuate between varieties, ideally a few varieties should be tested. Strong interest from NJ for this critical need!;

#### **IPM Comments from PCR:**

FROM REQUESTOR AND SOR/NER 2019 NOMINATION COMMENTS: VERY GOOD IPM FIT; ONLY ONE APPLIC NEEDED FOR CONTROL:08/15; VGF-NER; VGF-NCR, NER & NJ:08/24:

#### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman; Good Fit: A product that allows a single, targeted post-transplant application would reduce the number of herbicide applications, simplify weed management, and improve overall efficacy, while supporting crop rotation and flexibility in transplanted cucurbit systems.: Lynn Sosnoskie; Good Fit: Using one effective PRE application will reduce the number of POST applications required for minimizing weed interference: weed management system can be simplified, phytotoxicity form POST application can be reduced.: Thierry Besancon

 Mitchem, Wayne	P93-NC-DMP	RECD	NONE	FIELD TRIALS IN 1992 AND 1993. ETHALFLURALIN AT 1.2 AND 2.4 KG AI/HA APPLIED PPI, PRE- OR POSTTRANSPLANT ON NORFOLK SANDY LOAM SOIL; VIRTUALLY NO INJURY POSTTRANSPLANT, SEVERE INJURY PPI OR PRETRANSPLANT.
Grey, Timothy L.	P95-GA-DMP	RECD	NONE	FIELD TRIALS IN 1993 1994 AND 1995. CLOMAZONE AT 0.8 KG AI/HA OR ETHALFLURALIN AT 1.3 KG AI/HA APPLIED PPI, PRE- OR POSTTRANSPLANT ON FACEVILLE SANDY LOAM SOIL; DATA INDICATED GOOD CROP TOLERANCE TO CLOMAZONE AND ETHAL FLURALIN APPLIED POSTTRANSPLANT



Α

Date: 9/2/2025 Weed Science

PR# CHEMICAL (MFG) **COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14043 FLUMIOXAZIN + PYROXASULFONE (KICHEM, VALENT)

WATERMELON (09A=MELON SUBGROUP)

UNDER EVALUATION

Reasons for need: Annual weeds. Limited at-planting herbicide options in watermelon:07/25; FL: The combination of two MOA is important for the management of herbicide resistant weed species:08/25;

**REQ STATES** 

IN FL

**NorthEast Region** 

**NorthCentral Region** 

**Southern Region** 

**Western Region** 

**Reduced Risk** 

#### **PCR Use Pattern:**

Apply up to 8 fl oz/a of Fierce EZ between plastic mulch beds prior to transplanting watermelons. Contact with plastic mulch should be avoided. Refer to Fierce EZ label for guidance on adjuvants.

# **HQ Comments:**

The tolerance that will result from the ongoing post-transplant row middle use (PR12582) can cover this use. Flumioxazin is EPA GREEN & Pyroxasulfone is EPA CAUTION:08/25;

## **Nomination Justification:**

(2025 MI) See Prev;(2025 FL) See requestor comments.;

## **IPM Comments from PCR:**

Per Requester: Good Fit; This application would be used in row middles in plasticulture production systems- combining chemical and physical weed control methods:07/25;

## **IPM Comments from Nomination Process:**

; Good Fit: See requestor comments.: Kristen Searer-Jones



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13528 \*

ETHALFLURALIN + CLOMAZONE (GOWAN,LOVLND)

\* CUCUMBER (09B=SQUASH/CUCUMBER SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need: MORNING GLORY, PIGWEED, NUTSEDGE

**REQ STATES** 

HQ AR NJ NY OH

**NorthEast Region** 

A No

NorthCentral Region

Α

Southern Region

**Western Region** 

**Reduced Risk** 

# **PCR Use Pattern:**

MAKE 1 SOIL APPLIC OF 5 PT/A OF STRATEGY, AFTER TRANSPLANTING

# **HQ Comments:**

THIS IS A NEW REQUEST FOR THE COMBO PRODUCT STRATEGY ON CUCURBIT CROPS AS A PRE-EMERGENCE BROADLEAF TOOL IN TRANSPLANTED FIELDS (MOST CUCURBIT CROPS ARE NOW TRANSPLANTED); STRATEGY IS LABELED FOR BROADCAST PRE USE IN SEEDED CUCURBITS ONLY; FOR TRANSPLANTED CUCURBITS IT CAN ONLY BE USED POST-TRANSPLANT AND ONLY IN ROW MIDDLES; ETHAFLURALIN IS LABELED AS CURBIT EC BY LOVELAND, AND HAS THE SAME LABEL LANGUAGE AS STRATEGY:08/15; CLOMAZONE IS LABELED AS COMMAND 3 ME AND ALLOWS PRE TRANSPLANT USE IN WINTER/SUMMER SQUASH ONLY (NOT ALL CUCURBITS); IT ALSO IS EPA OK/GREEN FOR THIS MICROENCAPSULATED FORMULATION, WHILE ETHAFLURALIN IS EPA CAUTION; SEE ONGOING CLOMAZONE/CUCURBIT STUDY (PR# 11063), DESIGNED TO REDUCE PHI TO 30 DAYS, AND IT DOES ALLOW FOR PRE TRANSPLANT USE; DOW IS NOT INTERESTED IN SUPPORTING ADDITIONAL WORK WITH ETHAFLURALIN FOR THIS USE AT THIS TIME:09/15; THIS IS A LOVELAND DUAL AI PRODUCT:07/17; GOWAN CONFIRMED LOVELAND HOLDS THE DATA FOR THIS PRODUCT, AND GOWAN WILL SUPPORT IT IF LOVELAND DOES:08/18; EPA CAUTION:09/18; BOTH AIS HAVE TOLERANCES FOR CROP GROUP 9 CUCURBITS:10/18; NEED TO DISCUSS WITH LOVELAND:06/19; EPA GREEN (BOTH):09/19; THIS IS A LOVELAND PRODUCT SO IT IS THEIR DECISION:05/20; EPA GREEN (BOTH): 08/20; EPA YELLOW (ETHALFLURALIN), EPA GREEN (CLOMAZONE): 08/21; EPA ORANGE (ETHALFLURALIN: 08/22; PR#11776 ORIGINALLY WAS SUBMITTED UNDER THE CROP "CUCURBIT VEGETABLES". THAT REQUEST WAS BROKEN INTO 3 SEPARATE REQUESTS AS CANTALOPE, PR#13528 (CUCUMBER) & PR#13529 (SQUASH); FMC needs E/CS data before deciding on residue study: 5/23 JPB;;EPA HOLD CAUTION: 08/23 (ETHALFLURALIN), CLOMAZONE GREEN 08/23

#### **Nomination Justification:**

(2023 MI) See Prev;(2023 MD) See previous comments;(2023 NY) See previous comments for related crop groups.;(2024 MI) See prev;(2024 NY) Not sure that I can add much more that hasn't already been stated in database comments.;(2024 MD) see previous;(2024 NJ) See previous comments for this use; much needed for all transplanted cucurbits;(2025 MD) see previous comments;(2025 MI) See Prev;(2025 NJ) Excellent crop safety and No yield reduction in 2025 trials conducted on bareground transplanted cucumber in NJ with post-transplant OTT applications.;

#### **IPM Comments from PCR:**

FROM REQUESTOR AND SOR/NER 2019 NOMINATION COMMENTS: VERY GOOD IPM FIT; ONLY ONE APPLIC NEEDED FOR CONTROL:08/15; VGF-NER; VGF-NCR, NER & NJ:08/24:

### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman; Very Good Fit: Using one effective PRE application will reduce the number of POST applications required for minimizing weed interference: weed management system can be simplified, phytotoxicity from POST application can be reduced: Thierry Besancon



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

14042 \*

GLUFOSINATE (BASF, UPL NA)

PUMPKIN (09B=SQUASH/CUCUMBER SUBGROUP)

NEED E/CS DATA ONLY

Reasons for need:

Winter annual weeds, namely marestail. There are no effective options for glyphosate-resistant marestail in no-till and reduced-tillage pumpkin production systems:07/25; NM: Would be an added tool to help control winter annuals:08/25; NY: Good fit for no-till pumpkin systems with cover crops. Provides needed control of glyphosate-resistant marestail

REQ STATES IN NM NY

and other weeds where current options are limited or ineffective:08/25;

**NorthEast Region** 

Α

NorthCentral Region

Α

Southern Region

Western Region

Α

Reduced Risk

# **PCR Use Pattern:**

Apply Rely at 29 fl oz/a as a preplant broadcast spray at least one week prior to seeding pumpkins. After reviewing the EPA-approved use for preplant burndown in cucurbits, IR-4 suggests the following: Apply Rely 280 at 29 to 43 fl oz/a prior to seeding pumpkins. If 0.5 inches or more of rainfall or irrigation is received, seeding can be done after 3 days in fine and medium soils and after 7 days in coarse soils. If <0.5 inches of rainfall or irrigation is received, seeding must wait for 14 days in fine and medium soils and 21 days in coarse soils. See Rely label for soil texture definitions and guidance on adjuvants.

# **HQ Comments:**

This use is already approved by EPA. BASF supports as researchable, "Need E/CS Data Only" since a tolerance is already est in cucurbits, which includes pumpkin :08/25/sb; EPA (HOLD) CAUTION:08/25;

#### **Nomination Justification:**

(2025 CA) same; (2025 MI) See Prev; (2025 NY) In no-till and reduced-tillage pumpkin production systems, glyphosate-resistant marestail is a major weed problem with no consistently effective control options currently available. This issue is especially problematic when pumpkins are planted following terminated cover crops, where clean seedbeds are essential.; (2025 NJ) Successful no-till pumpkin cultivation in New Jersey and the broader northeast region depends heavily on proper burndown herbicide management. Single-application glyphosate treatments fail to adequately suppress glyphosate-resistant horseweed and Palmer amaranth populations, creating significant challenges given that pumpkin planting occurs during mid-July when problem weeds are well-established. At this advanced growth stage, resistant weed species have accumulated considerable vegetative mass and begun reproductive development, rendering them increasingly difficult to manage through herbicides with a single mode of action. Incorporating glufosinate into existing herbicide programs would offer producers an important additional tool for controlling these resistant weed populations. Beyond pumpkins, this herbicide enhancement would benefit production of other northeast winter squash crops—butternut, acorn, delicata, and hubbard varieties—that encounter comparable weed management difficulties and seasonal planting limitations. These diversified control options would promote more robust and sustainable weed management practices throughout regional cucurbit production systems.:

# **IPM Comments from PCR:**

Per Requester: Good Fit; This application would be made in no-till/reduced-tillage pumpkin production, often in tandem with terminated cover crops:07/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: The inclusion of glufosinate in these systems provides an additional mode of action to help manage herbicide resistance and improve overall weed control in low-disturbance systems. It aligns well with integrated weed management practices, especially when used in tandem with cover crop termination strategies. : Lynn Sosnoskie; Very Good Fit: Incorporating glufosinate into cucurbit weed control programs introduces a new herbicide mode of action that supports resistance management and mitigation efforts. This addition enhances weed suppression effectiveness within no-till production systems, where achieving adequate control presents ongoing difficulties. Such diversification directly supports integrated pest management principles through decreased dependence on single-mechanism herbicides and offers compatibility with cover cropping practices during pumpkin establishment after cover crop desiccation.: Thierry Besancon



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

14040 \*

SAFLUFENACIL (BASF)

PUMPKIN (09B=SQUASH/CUCUMBER SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

Winter annual weeds, namely marestail. Current burndown options in no-till/reduced tillage pumpkin production do not adequately control glyphosate-resistant marestail.:07/25; NM: Most pumpkin production in NM is for agro-tourism in connection with corn mazes during Halloween season. But this could be useful in NM controlling not only marestail, but also london rocket, an overwinter food source / virus reservoir for a leaf hopper vector:08/25; OR: The addition of saflufenacil for burndown will provide improved efficacy on brassica weeds in false seedbed methods in squash, pumpkin, and cucumber grown for seed or processes markets in western OR:08/25;

REQ STATES IN NM OR

NorthEast Region

Α

NorthCentral Region

Α

**Southern Region** 

Western Region

Α

Reduced Risk

Yes

### **PCR Use Pattern:**

Use Sharpen and make one preplant burndown application at 2.0 fl oz/a at least 7 days prior to seeding pumpkins. Follow product label for adjuvant requirements.

### **HQ Comments:**

This request is for preplant burndown of emerged weeds at least one week prior to seeding the crop, and not a match of XH476 is for preemergence use (after crop is seeded and before it emerges); BASF supports as "Potential: E/CS Data Before Approval for Residue:08/25/sb;

#### **Nomination Justification:**

(2025 CA) same;(2025 MI) See Prev;(2025 NJ) Effective burndown application is essential for successful no-till pumpkin production in New Jersey and throughout the northeast region. Glyphosate-resistant horseweed and Palmer amaranth are not effectively controlled with glyphosate applications alone, particularly problematic since pumpkin seeding occurs late in the season (mid-July) when these weeds have already established. By this timing, resistant weeds have developed substantial biomass and reproductive structures, making control increasingly difficult with single-mode herbicide applications. The addition of saflufenacil to the herbicide portfolio would provide growers with a valuable alternative mode of action for managing these resistant species. This herbicide would also prove beneficial for other winter squash varieties commonly grown in the northeast, including butternut, acorn, delicata, and hubbard squashes, which face similar weed pressure challenges and planting timing constraints. The expanded options would support more sustainable weed management across the entire cucurbit production system in the region.:

#### **IPM Comments from PCR:**

Per Requester: Good Fit; This burndown application would be used in tandem with no-till/reduced-tillage pumpkin production, often grown on terminated cover crops:07/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: The addition of saflufenacil to cucurbit weed management systems provides an additional mode of action that will help manage and mitigate herbicide resistance. It will improve overall weed control in no-till systems where effective control remains challenging. This approach perfectly aligns with integrated weed management strategies by reducing reliance on a single mode of action and can be used in conjunction with cover crops when pumpkins are planted following cover crop termination:: Thierry Besancon



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

12722 PYROXASULFONE (KICHEM)

\* PEAR (11-10=POME FRUIT GROUP)

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

Reasons for need: YELLOW NUTSEDGE, HERBICIDE-RESISTANCE ITALIAN RYEGRASS; FEW HERBICIDES AVAILABLE AND GROWERS RELY ON GLYPHOSATE AND HALOSULFURON; CONCERNS OF RESISTANCE EVOLVEMENT:05/19

**REQ STATES** 

OR PA

NorthEast Region

NorthCentral Region

Southern Region

Western Region

Reduced Risk

#### **PCR Use Pattern:**

USE THE ZIDUA SC PRODUCT; MAKE A BROADCAST ORCHARD FLOOR APPLIC OF 6.5 FL OZ/A (0.212 LB AI/A) DURING THE DORMANT SEASON; APPLY DURING THE RAINY SEASON TO ACTIVATE PRODUCT; NO PHI NOTED

# **HQ Comments:**

KEY EXPORT MARKETS NOTED AS MEXICO, CANADA; MFG SUPPORTS, RESIDUE AND PERFORMANCE DATA NEEDED:05/19; EPA GREEN:09/19; MFG CHANGED STATUS TO POTENTIAL, E/CS DATA BEFORE RESIDUE, AT FUW:09/24/19; Based on updated support email from KICHEM; status updated from "Potential" to "Researchable, Residue & E/CS Data Needed:06/24/sb; EPA CAUTION:08/24, 08/25;

#### **Nomination Justification:**

(2019 AR) Alternatives needed for yellow nutsedge control. Could aid in resistance management.;(2021 MD) see previous comments;(2021 MI) YELLOW NUTSEDGE, HERBICIDE-RESISTANCE ITALIAN RYEGRASS; FEW HERBICIDES AVAILABLE AND GROWERS RELY ON GLYPHOSATE AND HALOSULFURON; CONCERNS OF RESISTANCE EVOLVEMENT:05/19;(2022 MD) see database comments.;(2023 CA) Same;(2024 MD) see previous;(2024 CA) same as above;(2024 NJ) Same as previous comments;(2025 CA) same;

#### **IPM Comments from PCR:**

PER REQUESTER: VERY GOOD IPM FIT; PYROXASULFONE IS A GROUP 15 HERBICIDE WITH EFFICACY ON YELLOW NUTSEDGE AND ITALINA RYEGRASS; THIS HERBICIDE WOULD PROVIDE OPTIONS FOR GROWERS TO ROTATE MODES OF ACTION AND CONTROL THESE TWO IMPORTANT WEEDS:05/19; PER 2019 NOMINATION COMMENT: VERY GOOD FIT; WOULD ALLOW USE OF DIFFERENT MOA FOR RESISTANCE MANAGEMENT; VERY GOOD FIT: SAME: WSR; VGF-NER & WSR:08/24;

## **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold

 Moretti, Marcelo	P19-OR-DMP	RECD	NONE	ZIDUA WG AT 4, 8 AND 16 OZ PROD/A SPRAYED ON EACH SIDE OF TREE ROW; NO INJURY OR SIGNIFICANT YIELD REDUCTION.
Moretti, Marcelo	P20-OR-DMP	RECD	NONE	SECOND YEAR TRIAL. ZIDUA AT 4, 8 AND 16 OZ PROD/A + REFER (GLUFOSINATE) SPRAYED ON EACH SIDE OF THE TREE ROW; RESULTS SIMILAR TO 1ST YEAR – NO INJURY OR SIGNIFICANT YIELD REDUCTION.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

COMMODITY (CROP GROUP)

**PROJECT STATUS** 

13325 FLAZASULFURON (ISK)

\* CHERRY (12-12A=CHERRY SUBGROUP)

RESEARCHABLE, ONLY RESIDUE DATA NEEDED

Reasons for need: ANNUAL BROADLEAF WEEDS, YELLOW NUTSEDGE, ANNUAL GRASSES; LACK OF ALTERNATIVES

Α

**REQ STATES** 

NC CA PA MI OR

NorthEast Region

NorthCentral Region

Southern Region

Western Region

Α

**Reduced Risk** 

# **PCR Use Pattern:**

MISSION, 1.5 OZ/A; FOLIAR AND SOIL, 1 TO 2 APPLIC AND A RETREATMENT INTERVAL OF AT LEAST 30 DAYS; 75-DAY PHI; APPLY A SPLIT APPLICATION ONCE IN THE FALL OR WINTER AND AGAIN IN THE SPRING

#### **HQ Comments:**

AAFC-PMC CONDUCTED E/CS TRIALS IN 2020 AND 2021 AND RESIDUE TRIALS ARE PLANNED FOR 2022. CROP SAFETY TRIALS- ON SWEET CHERRY- 2 IN 2020 AND 1 IN 2021; PEACH- 2 IN 2020 AND 1 IN 2021; PLUM- 3 IN 2021. REGISTRANT CHANGED USE RATE AND APPLICATION TO "AT DORMANCY" AFTER INJURY SEEN IN SOME 2020 TRIALS:08/21; TREES MUST BE 2 YEARS OR OLDER:04/22; Status changed from "Potential: E/CS Data Before Approval for Residue Study" to "Covered By Another Project". E/CS is covered under P13323 Flazasulfuron/Peach 05/24/drs; as of a 04/24 mtg with ISK, they now support this project as Researchable, only Residue data needed:05/24/sb; EPA CAUTION:08/24 & 08/25:

## **Nomination Justification:**

(2021 MI) ANNUAL BROADLEAF WEEDS, YELLOW NUTSEDGE, ANNUAL GRASSES, LACK OF ALTERNATIVES; (2021 FL) Lack of alternatives for nutsedge control in stone fruits; a.i. provides POST control of yellow nutsedge and has PRE activity on a number of weeds.; (2022 MD) see database comments. Similar requests in peach and plum. If given an H+ would probably be combined?; (2022 CA) See previous; (2023 CA) same; (2024 MI) See Prev; (2024 NY) Lack of alternatives for nutsedge control in stone fruits; a.i. provides POST control of yellow nutsedge and has PRE activity on a number of weeds.;; (2024 MD) see previous; (2024 CA) same as above; (2025 CA) same; (2025 MI) See Prev;

#### **IPM Comments from PCR:**

PER REQUESTOR, GOODFIT; APPLICATION TIMING COMPATIBLE WITH PEST MONITORING; GOOD FIT: SAME: WSR; GF-NCR, NER & WSR:08/24;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13323 FLAZASULFURON (ISK)

\* PEACH (12-12B=PEACH SUBGROUP)

RESEARCHABLE, ONLY RESIDUE DATA NEEDED

Reasons for need:

ANNUAL BROADLEAF WEEDS, YELLOW NUTSEDGE, ANNUAL GRASSES; LACK OF ALTERNATIVES; MI: preemergence and postemergence control of sedges and grasses:08/25;

**REQ STATES** 

NC CA PA MI AL OH NJ

NorthEast Region

۱ ۵

NorthCentral Region

Southern Region A

Western Region

Α

**Reduced Risk** 

#### **PCR Use Pattern:**

MISSION, 1.5 OZ/A; FOLIAR AND SOIL, 1-2 APPLIC AND A RETREATMENT INTERVAL OF AT LEAST 30 DAYS; 75-DAY PHI; APPLY A SPLIT APPLICATION ONCE IN THE FALL OR WINTER AND AGAIN IN THE SPRING

# **HQ Comments:**

REGISTRANT CHANGED USE RATE AND APPLIC TO "AT DORMANCY" AFTER INJURY SEEN IN SOME 2020 TRIALS:08/21; TREES MUST BE 2 YEARS OR OLDER:04/22; ECS PROTOCOL SIGNED 03/23, RESIDUE MOVES FORWARD BASED ON E/CS DATA; WAS E/CS BEFORE RESIDUE FOR CATEGORY PRIOR TO SIGNING E/CS PROTOCOL:03/23 JPB; EPA GREEN:08/23; The performance protocol covers additional PR#s: 13324 Flazasulfuron/Plum & 13325 Flazasulfuron/Cherry 05/24/drs; as of a 04/24 mtg with ISK, they now support this project as needing residue only. Since a perf protocol is in process the status has been updated to Researchable, e/cs on-going; residue data needed:05/24/sb; EPA CAUTION:08/24; E/CS completed & status updated to "Researchable Only Residue Data Needed" 01/25/ds; EPA CAUTION:08/25;

#### **Nomination Justification:**

(2021 MI) ANNUAL BROADLEAF WEEDS, YELLOW NUTSEDGE, ANNUAL GRASSES, LACK OF ALTERNATIVES. ;(2021 FL) Lack of alternatives for nutsedge control in stone fruits; a.i. provides POST control of yellow nutsedge and has PRE activity on a number of weeds.;(2022 CA) See previous;(2022 MI) same;(2022 FL) See previous.;(2022 MD) see database comments;(2024 MI) See Prev;(2024 NJ) Increasing issue with yellow nutsedge in NJ due to repeated use of indaziflam PRE. Getting a POST herbicide for controlling nutsedge is much needed.;(2025 CA) same;(2025 FL) See previous comments.;(2025 MI) See Prev;(2025 NJ) See previous comments on yellow nutsedge control;

## **IPM Comments from PCR:**

PER REQUESTOR, GOOD FIT; APPLIC TIMING COMPATIBLE WITH PEST MONITORING; GF-NCR:08/24;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold; Good Fit: See previous comments.: Kristen Searer-Jones; Very Good Fit: Low use rate. Additional mode of action to help manage and mitigate herbicide resistance and/or troublesome weed species (nutsedge). This approach aligns well with integrated weed management strategies by reducing reliance on single modes of action and diversifying chemical control options.: Thierry Besancon

BATTS	Mitchem, Wayne	P23-NCP07	RECD	NONE	Trial conducted near Johnston, South Carolina. Year 1 of 2 with treatments applied to the same plots both years. Trial conducted in peach. Mission 25WG applied twice, 75 days apart, at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'Rich Pride' peaches growing in a sandy loam. No crop injury observed from any flazasulfuron treatment. Near complete control of weeds from all flazasulfuron treatments. Late freeze in Spring 2023 prevented yield data collection.
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Weed Science Date: 9/2/2025 **BATTS** Smith, Stephen C P23-NCP08 RECD Year 1 of 2 with treatments applied to the same plots both years. Trial conducted in NONE peach. Mission 25WG applied twice, 58 days apart, at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'O'Henry' peaches growing in a sand (89% sand). No crop injury observed from any flazasulfuron treatment. Light weed pressure prevented collection s weed control data. Yield not collected due to late freeze and late season disease pressure. Hanson, Brad **RECD** Trial conducted in plums. Mission 25WG applied twice, 59 days apart, at 0.8, 1.5, **BATTS** P23-CAP26 NONE 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'French prune' plums growing in a Yolo loam. No crop injury observed from any flazasulfuron treatment. Maintenance herbicide program provided excellent weed control, so no weed data collected. Flazasulfuron did not impact plum yield, regardless of rate. **BATTS** Hanson, Brad P23-CAP27 RECD NONE Trial conducted in plums. Mission 25WG applied twice, 63 days apart, at 0.8, 1.5. 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'French Improved' prunes. No crop injury observed from any flazasulfuron treatment, including fruit injury inspection at harvest. Good to excellent bindweed control (≥80%) from all treatments 15 and 30 days after second application. Bindweed was controlled 96% or greater by the two higher rates at all evaluations. **BATTS** Chaudhari. Dr. Sushila P23-MIP11 RECD NONE Mission 25WG applied twice, 39 days apart, at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'Montmorency' cherries growing in a Dryden sandy loam. No crop injury observed from any flazasulfuron treatment. Good to excellent total broadleaf control observed from three highest rates was 83 to 92% at 28 days after second application (DAT-2). This control declined to 35 to 78% by 68 DAT-2. Grass control 28 DAT-2 ranged from 89 to 98% from all rates and maintained 80 to 100% control at 68 DAT-2. Flazasulfuron did not impact cherry yield, regardless of rate. **BATTS** Liu. Rui P23-WAP05 RECD NONE Year 1 of 2 with treatments applied to the same plots both years. Trial conducted in sweet cherries growing in a silt loam at the Prosser research station. Mission 25WG applied once at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks. Little to no crop injury observed from flazasulfuron treatments. Excellent barnyardgrass control from all rates through 40 days after application. No yield data collected.



Project				Weed Science	Date: 9/2/2025
BATTS	Soldan, Nicole	P24-MIP01	RECD	NONE	Year 2 of 2, with treatments applied to the same plots both years. Mission 25WG applied twice, 32 days apart, at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'Montmorency' cherries growing in a Dryden sandy loam. No crop injury observed from any flazasulfuron treatment. Flazasulfuron provided fair to good control of most broadleaf weeds 22 days after second application (DAT-2), ranging from 68 to 87%. Control of curly dock at this time was slightly better, ranging from 82 to 97%. Weed control was generally the same from all rates through 51 DAT-2, but a decline in horseweed and hawkweed control was evident. Flazasulfuron did not impact cherry yield, regardless of rate.
BATTS	Mitchem, Wayne	P24-NCP02	RECD	NONE	Trial conducted near Johnston, South Carolina. Year 2 of 2 with treatments applied to the same plots both years. Trial conducted in peach. Mission 25WG applied twice, 60 days apart, at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'Rich Pride' peaches growing in a sandy loam. No vigor reductions from 2023 flazasulfuron applications observed in spring 2024. No crop injury observed from any flazasulfuron treatment in Year 2. Excellent weed control from all treatments through 40 days after first spray. No weed control data was collected after second 2024 application. Grower thought data collection was complete and applied maintenance herbicides to entire trial.
BATTS	Smith, Stephen C	P24-NCP03	RECD	NONE	Year 2 of 2 with treatments applied to the same plots both years. Trial conducted in peach. Mission 25WG applied twice, 51 days apart, at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'O'Henry' peaches growing in a sand. No crop injury observed from any flazasulfuron treatment. Light weed pressure prevented collection of weed control data. Severe wind storm approximately one week prior to anticipated harvest required yield data to be estimated through fruit counts and average fruit weights. No yield differences seen between treatments, using this data.
BATTS	Hanson, Brad	P24-CAP01	RECD	NONE	Year 2 of 2 with treatments applied to the same plots each year. Trial conducted in plums. Mission 25WG applied twice, 58 days apart, at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'French prune' plums growing in a Yolo loam. No crop injury observed from any flazasulfuron treatment. Maintenance herbicide program provided excellent weed control, so no weed data collected. Flazasulfuron did not impact plum yield, regardless of rate.
BATTS	Liu, Rui	P24-WAP01	RECD	NONE	Year 2 of 2 with treatments applied to the same plots both years. Trial conducted in sweet cherries growing in a silt loam at the Prosser research station. Mission 25WG applied once at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks. No crop injury observed from flazasulfuron treatments. Fair to good weed control from all rates through 65 days after treatment. Control tended to be higher with highest two rates, with some significant differences. No yield data collected.



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BATTS	Hanson, Brad	P24-CAP23	RECD	NONE	Year 2 of 2 with treatments applied to the same plots each year. Trial conducted in plums. Mission 25WG applied twice, 58 days apart, at 0.8, 1.5, 2.85 or 5.7 oz/a (0.0125, 0.023, 0.045 or 0.089 lb ai/a) along both sides of the row and across the lower trunks of 'French Improved' prunes. No crop injury observed from any flazasulfuron treatment, including fruit injury inspection at harvest. Good to excellent bindweed control (≥80%) from all treatments 15 and 30 days after second application. Bindweed was controlled 89% or greater by the two higher rates at all evaluations.			
BATTS	Performance Summary	P25-HQ-SUM	RECD	NONE	SUMMARY OF IR-4 PRODUCT PERFORMANCE PREPARED BY RBB. INCLUDES DATA FROM FT ID#s 23-NCP07, 23-NCP08, 23-CAP26, 23-CAP27, 23-MIP11, 23-WAP05, 24-MIP01, 24-NCP02, 24-NCP03, 24-CAP01, 24-WAP01, AND 24-CAP23. FORWARDED TO ISK:01/25			

Weed Science

Date: 9/2/2025



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

13324 FLAZASULFURON (ISK)

\* PLUM (12-12C=PLUM SUBGROUP)

RESEARCHABLE, ONLY RESIDUE DATA NEEDED

Reasons for need:

ANNUAL BROADLEAF WEEDS, YELLOW NUTSEDGE, ANNUAL GRASSES; LACK OF ALTERNATIVES;

REQ STATES NC CA MI

 $CA-Sacramento\ Valley\ prunes\ need\ more\ herbicide\ options\ to\ control\ important\ grass\ and\ broadleaf\ weeds: 05/24;\ MI:$ 

preemergence and postemergence control of sedges, broadleaves, and grasses:08/25;

NorthEast Region

NorthCentral Region

Α

**Southern Region** 

Western Region

Α

Reduced Risk

# **PCR Use Pattern:**

MISSION, 1.5 OZ/A; FOLIAR AND SOIL, 1 TO 2 APPLIC AND A RETREATMENT INTERVAL OF AT LEAST 30 DAYS; 75-DAY PHI; APPLY A SPLIT APPLICATION ONCE IN THE FALL OR WINTER AND AGAIN IN THE SPRING

# **HQ Comments:**

REGISTRANT CHANGED USE RATE AND APPLICATION TO "AT DORMANCY" AFTER INJURY SEEN IN SOME 2020 TRIALS:08/21 (IN PEACH & CHERRY); TREES MUST BE 2 YEARS OR OLDER:04/22; Status changed from "Potential: E/CS Data Before Approval for Residue Study" to "Covered By Another Project". E/CS is covered under P13323 Flazasulfuron/Peach 05/24/drs; as of a 04/24 mtg with ISK, they now support this project as Researchable, only Residue data needed:05/24/sb; EPA CAUTION:08/24 & 08/25;

### **Nomination Justification:**

(2021 MI) ANNUAL BROADLEAF WEEDS, YELLOW NUTSEDGE, ANNUAL GRASSES, LACK OF ALTERNATIVES. ;(2021 FL) Lack of alternatives for nutsedge control in stone fruits; a.i. provides POST control of yellow nutsedge and has PRE activity on a number of weeds.;(2022 CA) See previous;(2022 MI) same;(2023 CA) Same;(2024 MI) See Prev;(2025 CA) same;(2025 MI) See Prev;

#### **IPM Comments from PCR:**

PER REQUESTOR, GOODFIT; APPLICATION TIMING COMPATIBLE WITH PEST MONITORING; GOOD FIT: SAME: WSR; GF-NCR:08/24;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13332 2,4-D CHOLINE (CORTEVA)

Α

\* CANEBERRY (BLACKBERRY) (13-07A=CANEBERRY SUBGROUP)

UNDER EVALUATION

Reasons for need:

WEEDS, LIMITED HERBICIDES AVAILABLE TO CONTROL PROBLEMATIC BROADLEAF WEEDS; MA: Many perennial broadleaf weeds become established and problematic in caneberries, but there are very few herbicide options

REQ STATES NO

NY

NC IN OH NJ AR MA

to control these weeds:06/25;

NorthEast Region

NorthCentral Region

Southern Region

Α

Western Region

Α

Reduced Risk

# **PCR Use Pattern:**

EMBED EXTRA, 1-2 PINTS/A; DIRECTED TO BUSHES, WITH 1 OR 2 APPLIC, RETREATMENT INTERVAL OF AT LEAST 30 DAYS, AND A 30-DAY PHI; APPLY IN DORMANT STAGE AND AGAIN IN EARLY SPRING, LIMIT CONTACT WITH FOLIAGE

# **HQ Comments:**

CATEGORY CHANGED FROM POTENTIAL, E/CS DATA BEFORE APPROVAL FOR RESIDUE STUDY TO E/CS DATA ONGOING:12/21; STATUS UPDATED TO RESEARCHABLE, E/CS ON-GOING; RESIDUE DATA NEEDED:10/22; EPA GREEN: 08/23; E/CS Data on-going updated to Under Eval to determine if we can move forward with Residue:08/24/sb; E/CS is complete and will wait to hear back from Corteva to see if the status can be updated to pursue residue:09/24/sb; EPA PENDING:08/25;

### **Nomination Justification:**

(2021 FL) Needed for control of problematic broadleaf weeds, particularly of interest for control of broadleaf weeds in the seeded ryegrass growing between raised plastic mulch beds.;(2024 MI) See prev;(2025 FL) See previous comments.;(2025 MD) see previous comments;(2025 CA) same;(2025 MI) See Prev;(2025 NY) Weed management in caneberry production is increasingly challenged by the establishment of persistent and problematic broadleaf weed species. Perennial broadleaf weeds, in particular, can become well established and difficult to control, yet growers have access to very few effective herbicide options. This lack of chemical tools limits the ability to manage weeds efficiently, increasing production costs and potentially reducing yield and fruit quality.:

## **IPM Comments from PCR:**

PER REQUESTOR, GOODFIT: PROVIDES CONTROL OF WEEDS THAT ARE DIFFICULT TO CONTROL; GF-NCR:08/24:

Α

#### **IPM Comments from Nomination Process:**

; Good Fit: See previous comments.: Kristen Searer-Jones; Very Good Fit: see previous comments: Megan James Hickman; Unknown: : Lynn Sosnoskie

BATTS Bertucci, Matt

P22-ARP02

RECD

NONE

YEAR 1 OF 2. EMBED EXTRA APPLIED THREE TIMES PER YEAR AT 2, 3, 4, OR 6 PT/A (0.95, 1.43, 1.9 OR 2.85 LB AE/A) TO 'OUACHITA' BLACKBERRIES GROWING IN A FINE SANDY LOAM. INITIAL APPLICATION MADE ACROSS LOWER PORTIONS OF DORMANT CANES. SECOND SPRAY APPLIED AS UNSHIELDED BANDS ALONG BOTH SIDES OF CROP ROW. THIRD SPRAY APPLIED POST-HARVEST ACROSS LOWER PORTIONS OF CANES. NO CROP INJURY FROM DORMANT OR POST-HARVEST TIMINGS, REGARDLESS OF RATE. SLIGHT CROP INJURY SEEN AFTER SECOND SPRAY. GOOD TO EXCELLENT BROADLEAF WEED CONTROL FROM BOTH RATES AFTER EACH TIMING. NO DIFFERENCES BETWEEN TREATMENTS FOR FRUIT YIELD OR AVERAGE BERRY WEIGHT.



Project				Weed Science Date: 9	
BATTS	Bolda, Mr. Mark	P22-CAP05	RECD	NONE	YEAR 1 OF 2. EMBED EXTRA APPLIED TWO TIMES IN 2022 AT 3 OR 6 PT/A (1.43 OR 2.85 LB AE/A) TO 'MARAVILLA' RASPBERRIES. INITIAL APPLICATION MADE ACROSS LOWER PORTIONS OF DORMANT CANES. SECOND SPRAY APPLIED AS BANDS ALONG BOTH SIDES OF CROP ROW. VERY LITTLE CROP INJURY SEEN ON NON-TARGET CANES, REGARDLESS OF RATE. NO DIFFERENCES BETWEEN TREATMENTS FOR FRUIT SIZE. YIELD NOT REDUCED BY EITHER RATE AT FIRST TWO HARVESTS. BOTH RATES SIGNIFICANTLY REDUCED YIELD AT THIRD (LAST) HARVEST.
BATTS	Moretti, Marcelo	P22-ORP09	RECD	NONE	REPORT INCLUDES BOTH YEARS OF 2-YEAR TRIAL WITH TREATMENTS APPLIED TO THE SAME PLOTS BOTH YEARS. EMBED EXTRA APPPLIED AT 3 OR 6 PT/A (1.43 OR 2.85 LB AI/A) THREE TIMES PER YEAR; DORMANT, SPRING AND POST-HARVEST. TREATMENTS APPLIED ALONG BOTH SIDES AND ACROSS THE LOWER 1.5' OF CANES AT ALL SIX TIMINGS. POOR WEED CONTROL BOTH YEARS FROM BOTH RATES. BOTH RATES CAUSED INJURY, SOMETIMES SIGNIFICANT, THROUGH 30 DAYS AFTER THE SECOND 2022 IN-SEASON TIMINGS. NO INJURY SEEN IN 2023. NO NEGATIVE IMPACT ON FRUIT DEVELOPMENT OR YIELD EITHER YEAR.
BATTS	Mitchem, Wayne	P22-NCP03	RECD	NONE	YEAR 1 OF 2. EMBED EXTRA APPLIED THREE TIMES PER YEAR AT 2, 3, 4, OR 6 PT/A (0.95, 1.43, 1.9 OR 2.85 LB AE/A) TO 'NAVAHO' BLACKBERRIES GROWING IN A LOAMY SAND. INITIAL APPLICATION MADE ACROSS DORMANT CANES. LATER APPLICATIONS BANDED ALONG BOTH SIDES OF ROW. NO CROP INJURY SEEN FROM ANY TREATMENT THROUGHOUT THE YEAR AND NO DIFFERENCES BETWEEN TREATMENTS FOR FRUIT NUMBER OR WEIGHT. NO WEED CONTROL DATA COLLECTED.
BATTS	Bertucci, Matt	P23-ARP02	RECD	NONE	YEAR 2 OF 2. EMBED EXTRA APPLIED THREE TIMES PER YEAR AT 2, 3, 4, OR 6 PT/A (0.95, 1.43, 1.9 OR 2.85 LB AE/A) TO 'OUACHITA' BLACKBERRIES GROWING IN A FINE SANDY LOAM. INITIAL APPLICATION MADE ACROSS LOWER PORTIONS OF DORMANT CANES. SECOND SPRAY APPLIED AS UNSHIELDED BANDS ALONG BOTH SIDES OF CROP ROW. THIRD SPRAY APPLIED POST-HARVEST ACROSS LOWER PORTIONS OF CANES. SLIGHT, TRAINENT INJURY WAS OBSERVED ROM SOME 2023 TREATMENTS BUT NO NEGATIVE IMPACT SEEN ON YIELD PARAMETERS FROM ANY 2,4-D CHOLINE TREATMENT.



Weed Science

**BATTS** Bolda, Mr. Mark P23-CAP30 RECD NONE 2023 WAS YEAR 2 OF 2 WITH TREATMENTS APPLIED TO THE SAME PLOTS EACH YEAR. EMBED EXTRA APPLIED TWO TIMES IN 2022 AT 3 OR 6 PT/A (1.43 OR 2.85 LB AE/A) TO 'MARAVILLA' RASPBERRIES. INITIAL SPRAY MADE ALONG BOTH SIDES AND ACROSS LOWER PORTIONS OF DORMANT CANES. SECOND SPRAY APPLIED AS BANDS ALONG BOTH SIDES OF CROP ROW. CANES REMOVED BY GROWER DURING 2023 SEASON, SO ONLY ONE (DORMANT) APPLICATION MADE AND NO HARVEST OCCURRED IN 2023. SPRING 2023 EVALUATIONS SHOWED THAT 2022 APPLICATIONS DID NOT IMPACT CANE DEVELOPMENT. 2.4-D CHOLINE PROVIDED NEAR COMPLETE WEED CONTROL AT TIME OF CANE REMOVAL. **RECD** NONE **BATTS** Moretti. Marcelo P23-ORP11 REPORT INCLUDES BOTH YEARS OF 2-YEAR TRIAL WITH TREATMENTS APPLIED TO THE SAME PLOTS BOTH YEARS. EMBED EXTRA APPPLIED AT 3 OR 6 PT/A (1.43 OR 2.85 LB AI/A) THREE TIMES PER YEAR; DORMANT, SPRING AND POST-HARVEST. TREATMENTS APPLIED ALONG BOTH SIDES AND ACROSS THE LOWER 1.5' OF CANES AT ALL SIX TIMINGS. POOR WEED CONTROL BOTH YEARS FROM BOTH RATES. BOTH RATES CAUSED INJURY. SOMETIMES SIGNIFICANT, THROUGH 30 DAYS AFTER THE SECOND 2022 IN-SEASON TIMINGS. NO INJURY SEEN IN 2023. NO NEGATIVE IMPACT ON FRUIT DEVELOPMENT OR YIELD EITHER YEAR. **BATTS** Mitchem, Wayne P23-NCP06 RECD NONE YEAR 2 OF 2. EMBED EXTRA APPLIED THREE TIMES PER YEAR AT 2, 3, 4, OR 6 PT/A (0.95, 1.43, 1.9 OR 2.85 LB AE/A) TO 'NAVAHO' BLACKBERRIES GROWING IN A LOAMY SAND. INITIAL APPLICATION MADE ACROSS DORMANT CANES. LATER APPLICATIONS BANDED ALONG BOTH SIDES OF ROW. NO CROP INJURY SEEN FROM ANY TREATMENT THROUGHT THE 2-YR TRIAL AND NO DIFFERENCES BETWEEN TREATMENTS FOR FRUIT NUMBER OR WEIGHT. NO WEED CONTROL DATA COLLECTED. Performance Summary **RECD** NONE SUMMARY OF IR-4 PRODUCT PERFORMANCE PREPARED BY RBB. INCLUDES **BATTS** P24-HQ-SUM DATA FROM FT ID#s 22-ARP02, 22-CAP05, 22-ORP09, 22-NCP03, 23-ARP02, 23-CAP30, 23-ORP11, 23-NCP06. FORWARDED TO CORTEVA:08/24

Date: 9/2/2025



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13968 \*

ICAFOLIN-METHYL (BAYER)

\* BLUEBERRY (HIGHBUSH) (13-07B=BUSHBERRY SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

**Reasons for need:** 

Annual grasses (Italian ryegrass, annual bluegrass, barnyard grass), annual broadleaves. Cases of resitance to herbicides in group 1,2,5,9,10,15,22 in Italian ryegrass, and groups 1,2,9,22, and29 in annual bluegrass:06/25; ME: We are interested in the results of this trial for similar use in Maine wild blueberry. The residue results from this work will apply to our lowbush (wild) crop as well:07/25; MI: Icafolin-methyl would provide a new site of action for controlling troublesome weeds in MI highbush blueberries, including horseweed, pigweed, and lambsquarters, many of which have developed resistance to current herbicides:08/25;

REQ STATES OR ME MI

NorthEast Region

Α

**NorthCentral Region** 

Α

**Southern Region** 

Western Region

Α

**Reduced Risk** 

#### PCR Use Pattern:

Make three applications of icafolin-methyl at 0.044 to 0.134 lb ai/a, approximately 30 days apart, as a broadcast spray to the orchard floor or as a post-directed spray to orchard floor and across the lower blueberry bushes. Bayer supports only 2 product applications (instead of the 3 that were originally proposed), guidance on a PHI is still pending, and crop safety data is necessary prior to any residue work:08/25/sb;

#### **HQ Comments:**

Key Export Markets: Asia, Canada, EU; EPA PENDING:08/25; Bayer supports as Potential: E/CS Data Before Approval for Res with use pattern updates:08/25/sb;

#### **Nomination Justification:**

(2025 MD) see previous comments; (2025 CA) same; (2025 MI) See Prev; (2025 NJ) Recently confirmed case of resistance to herbicides in WSSA group 2, 9, and 22 for weeds present in NJ blueberry fields. Additional MOA needed for control of these species.;

# **IPM Comments from PCR:**

Per Requester: Very Good Fit; Effectively a new mode of action for POST emergence control of Italian ryegrass and annual bluegrass:06/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman; Good Fit: This approach perfectly aligns with integrated weed management strategies by reducing reliance on a limited number of herbicide modes of action: Thierry Besancon



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

13974 PYROXASULFONE (KICHEM)

\* BLUEBERRY (HIGHBUSH) (13-07B=BUSHBERRY SUBGROUP)

UNDER EVALUATION

Reasons for need:

Many winter grasses (Italian ryegrass, annual bluegrass), yellow nutsedge, many annual broadleaf weeds (pigweeds, Conyzas, groundsel). Need to expand options for sedges and grasses. Only Dual Magnum is labeled in this MOA (Group 15), and Devrinol (not widely used):06/25; MI: Nutsedge & to control grasses:06/25; MI: Expands Group 15 options beyond Dual Magnum, and would improve management of sedges and resistant grass populations in highbush blueberries:08/25; FL: Lack of management options for grasses and nutsedge:08/25;

REQ STATES OR MI FL

**NorthEast Region** 

NorthCentral Region

Southern Region

Α

Western Region

Α

**Reduced Risk** 

#### **PCR Use Pattern:**

Comprehensive use pattern reads as follows: Apply Zidua SC at 4 to 8.25 fl oz/a twice per year, approximately 30 days apart, with the last application no closer than 30 days before harvest. Applications will be post-directed to the soil and across the lower 2' of the blueberry bushes. Do not use on coarse soils or soils with < 1% organic matter.

# **HQ Comments:**

Key Export Markets: Asia, Canada, EU; EPA CAUTION:08/25;

Α

### **Nomination Justification:**

(2025 CA) same; (2025 FL) See previous comments.; (2025 MI) See Prev; (2025 NJ) S-metolachlor is only available for use on highbush blueberry through a 24(c) SLN label in NJ; limited option for controlling grasses since Surflan is not available anymore. Over-reliance on indaziflam is also concerning ith regards of MOA rotation and shift in weed populations to sedge species.:

### **IPM Comments from PCR:**

Per Requeser: Very Good Fit; Useful to control resistant weeds, and may delay resistance to group 15 because it is believed that active ingredients in group 15 may target multiple and distinct sites. Rarely cases of cross resistance in group 15 are observed:06/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: See previous comments.: Kristen Searer-Jones; Very Good Fit: This approach perfectly aligns with integrated weed management strategies by reducing reliance on a limited number of herbicide modes of action:: Thierry Besancon

Moretti. Marcelo

P25-OR-DMP

RECD

Pyroxasulfone was applied early March at 146, 292, 584, or 1,170 g ai/ha post-directed along both sides of the rows and across lower 2 feet of well-established 'Elliot' highbush blueberries. Each pyroxasulfone treatment included 1,150 g ai/ha glufosinate. Treatments also included glufosinate alone at 1,150 g ai/ha, for comparison. No crop injury observed from any treatment through 5 months after treatment (MAT). At 4 MAT, good to excellent control of smartweed, Northern willowherb and fescue seen from all pyroxasulfone treatments, with the exception of smartweed control from the lowest rate. Yield from pyroxasulfone treatments was not different from glufosinate alone.



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

COMMODITY (CROP GROUP)

PROJECT STATUS

13931 \*

ICAFOLIN-METHYL (BAYER)

BLUEBERRY (LOWBUSH) (13-07BGH=BUSHBERRY AND LOW GROWING BERRY SUBGROUPS)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR RESIDUE STUDY

Reasons for need:

Fine leaf sheep fescue (grass) Possibly broadleaf weeds as well such as goldenrod and red sorrel. Fewer herbicides are registered for use in Maine due to PFAS restrictions and weeds have become resistant to hexazinone, an herbicide relied on for many years:04/25;

**REQ STATES** 

ME

NorthEast Region

Α

NorthCentral Region

**Southern Region** 

Western Region

Reduced Risk

#### PCR Use Pattern:

Make one broadcast application after emergence of weeds and lowbush blueberries in the vegetative year (year 1 of 2 in fruit production). A labeled rate of a methylated seed oil or ammonium sulfate should be included in the spray mixture". An Al rate has not been specified by the requester but supporting data show a rate of 0.33 to 1.0 lb ai/a". Requester updated 7/25/25 to Make one broadcast application at 0.089 to 0.178 lb ai/a prior to lowbush blueberry emergence in its non-fruiting year. A labeled rate of a methylated seed oil or ammonium sulfate should be included in the spray mixture:07/25/sb; Bayer supports a rate of 100-150 g ai/ha and that crop safety data is necessary prior to any residue work:08/25/sb;

### **HQ Comments:**

Key Export Markets: Asia and Europe, with established MRLs in Europe; EPA PENDING:08/25; Bayer supports as Potential: E/CS Data Before Approval for Res with use pattern updates:08/25/sb;

#### **Nomination Justification:**

(2025 MD) see requestor comments;

#### **IPM Comments from PCR:**

Per Requester: Good Fit; useful in controlling populations with established pesticide resistance application time is post-emergence and in our wild blueberry production system we would apply this during our non-blooming, non-cropping year therefore avoiding any off-target impacts to pollinators or beneficial insects:04/25;

**RECD** 

# **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman

Percival, David

P24-NS-DMP

Icafolin-methyl applied broadcast prior to blueberry emergence in the vegetative year (year 1 of 2 in fruit cycle). Icafolin was applied alone at 0.134 or 0.267 lb ai/a. Other treatments included icafolin at 0.33 lb ai/a plus indaziflam at 0.165 lb ai/a and icafolin at 0.66 lb ai/a plus indaziflam at 0.33 lb ai/a. Minor foliar injury seen with some icafolin treatments up to 28 days after application (DAA), but not present afterwards. Compared to the hexazinone + terbacil standard at 28 DAA, significant reductions in ground cover from weeds, particularly grasses, were seen from the icafolin treatments. Reduction in grass coverage remained high from icafolin through all

other evaluations.



Weed Science Date: 9/2/2025

Percival, David

P24-NS-DMP

RECD

Icafolin-methyl applied broadcast prior to blueberry emergence in the vegetative year (year 1 of 2 in fruit cycle). Icafolin was applied alone at 0.134 or 0.267 lb ai/a. Other treatments included icafolin at 0.33 lb ai/a plus indaziflam at 0.165 lb ai/a and icafolin at 0.66 lb ai/a plus indaziflam at 0.33 lb ai/a. Icafolin treatments caused no crop injury. Compared to the hexazinone + terbacil standard at 14 days after application, both rates of icafolin applied alone significantly reduced ground cover of broadleaf weeds and total weeds but not grasses. At 2 months after application and onward, all icafolin treatments significantly reduced ground coverage of grasses and total weeds, compared to both the untreated and the hexazinone + terbacil standard.



Weed Science Date: 9/2/2025

PR# 13890 CHEMICAL (MFG)

**EPYRIFENACIL (VALENT)** 

### **COMMODITY (CROP GROUP)**

\* GRAPE (13-07F=SMALL FRUIT VINE CLIMBING SUBGROUP, EXCEPT FUZZY KIWIFRUIT)

#### **PROJECT STATUS**

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR RESIDUE STUDY

**REQ STATES** 

# Reasons for need:

Annual grasses and broadleaf weeds, including bluegrass, horseweed, common lambsquarters, morningglory, Virginia pepperweed, common ragweed. Annual bluegrass (diuron and glyphosate resistant), horseweed (glyphosate and paraquat resistant), limited non-selective postemergence herbicides available for use in blueberry to replace paraquat, or complement the use of glufosinate; glufosinate and glyphosate may cause severe crop injury either dur to trunk splitting (glufosinate) or systemic activity trough sucker absorption (glyphosate):08/24; MI: Epyrifenacil offers a new site of action with rapid burndown activity that can be tank-mixed with glufosinate for synergistic control of difficult and resistant species:08/25;

**NorthEast Region** 

Α

NorthCentral Region

Α

**Southern Region** 

Α

Western Region

**Reduced Risk** 

NJ NY OH KY NC MI

# **PCR Use Pattern:**

Make 3 applications of Rapidicil at 5 fl oz/a plus adjuvant per year, 30 days apart, with the last application at least 14 days prior to harvest. Applications will be made along both sides and across the base of the crop. Valent supports a max of 2 applications with a 30 day retreatment interval during dormant and prior to bud break. Maximum annual use of 10 fl oz/A. Target use rate of 5 fl oz/A with a maximum per application use rate of 10 fl oz/A. Labeling will require tank mixture with another burndown herbicide for resistance management/product stewardship:08/24

## **HQ Comments:**

Key Exports: Europe, Canada. Email from registrant indicated concern with systemic movement if suckers or other green tissue is exposed to spray. Early input from the registrant indicated only dormant uses in perennial crops:08/24/sb; Valent supports as Potential: E/CS Data Before Approval for Residue, with the Use Pattern noted:08/24/sb;

#### **Nomination Justification:**

(2024 MI) See Prev;(2024 FL) See previous comments.;(2024 NY) Control of broadleaves and grasses. Alternative to glyphosate, glufosinate and paraquat the have crop injury concerns or worker safety concerns.;(2024 MD) see previous;(2024 NJ) Same as listed previously. Alternative to paraquat and glyphosate are much needed because of existing herbicide resistance in the region (horseweed);;(2025 FL) See previous comments.;(2025 MD) see previous comments;(2025 MI) See Prev;(2025 NY) Grape growers are facing increasing challenges with annual grasses and broadleaf weeds, including glyphosate- and paraquat-resistant species such as horseweed and annual bluegrass. The current reliance on a limited number of non-selective POST herbicides primarily glyphosate, glufosinate, and paraquat—raises concerns due to crop injury risks, resistance development, and worker safety issues. Epyrifenacil offers a promising alternative, with rapid burndown activity, a low use rate, and a low vapor pressure, minimizing off-target movement.;(2025 NJ) See previous comments;

#### **IPM Comments from PCR:**

Per Requester: Good Fit; Useful for controlling weeds with known resistance to diuron, glyphosate and paraquat. Potential for chemical control of grape suckers. Low use rate herbicide as compared to glyphosate and glufosinate. Low risk of off-target movement due low vapor pressure. Limited number of PPO herbicide currently labeled for POST weed control in grape. Because of POST grass control, Epiryfenacil will provide an alternative to Group I herbicides; VGF-NCR, SOR & NER:08/24; NY: vgf: limited number of ppo herbicide currently labeled for post weed control in grape. Because of post grass control, epiryfenacil will provide an alternative to group i herbicides:08/24; NJ: vgf: lower use rate is also important to consider. Introduction of new moa that can help diversifying herbicide rotation in perennial crops:08/24;

#### **IPM Comments from Nomination Process:**

; Good Fit: See previous comments.: Kristen Searer-Jones; Very Good Fit: see previous comments: Megan James Hickman; Good Fit: Epyrifenacil supports herbicide resistance management by diversifying the chemical tools available for postemergence weed control. Its ability to control resistant biotypes and its compatibility with tank mixes (e.g., glufosinate) make it ideal for integrated programs targeting tough or resistant weeds. With few PPO herbicides currently labeled in grapes, this product fills a critical gap and reduces dependence on existing chemistries, aligning with long-term IPM and sustainability goals in perennial crop production.: Lynn Sosnoskie; Very Good Fit: This approach perfectly aligns with integrated weed management strategies by reducing reliance on a limited number of herbicide modes of action:: Thierry Besancon



Weed Science Date: 9/2/2025



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

12579 FLUMIO

FLUMIOXAZIN + PYROXASULFONE (KICHEM, VALENT)

\* STRAWBERRY (13-07G=LOW GROWING BERRY SUBGROUP)

**UNDER EVALUATION** 

Reasons for need:

WEEDS IN ROW MIDDLES; IMPROVED SPECTRUM OF CONTROL OVER CURRENTLY REGISTERED PRODUCTS; NY/Weed control in row middles is a significant issue late season after at-plant treatments have broken down;

REQ STATES F

FL SC OR AL DE MD AR IN NJ OH NY

increased/improved spectrum of control:09/23

Α

NorthCentral Region

Southern Region

Α

Western Region

**Reduced Risk** 

#### **PCR Use Pattern:**

NorthEast Region

REQUESTOR INDICATED THE PRODUCT AS COBRA (LACTOFEN), BUT THE AI IS SPECIFIED AS FLUMIOXAZIN + PYROXASULFONE, WHICH IS THE FIERCE PRODUCT; USE PATTERN GIVEN IS: MAKE 2 SOIL OR FOLIAR APPLIC, 14 DAYS APART; APPLY AS A PRE TO SOIL OR AS A POST ON PLANTS LESS THAN 5 INCHES TALL; DO NOT ALLOW TO COME IN CONTACT WITH THE CROP; NO RATE OR PHI SPECIFIED; IR-4 SUGGESTS CONSIDERATION OF A 30-DAY INTERVAL BETWEEN APPLIC:07/20

# **HQ Comments:**

TOLERANCE IS ESTABLISHED FOR FLUMIOXAZIN ON CROP SUBGROUP 13-07G, WITH STRAWBERRY AS THE REP CROP; NO KEY EXPORT MARKETS:07/18; VALENT AND KUMIAI SUPPORT, BUT KUMIAI REQUIRES PERFORMANCE DATA BEFORE APPROVAL FOR RESIDUE WORK:08/18; PERFORMANCE PROTOCOL WAS SIGNED 9/5/23, SO THE CATEGORY HAS NOW BEEN CHANGED FROM POTENTIAL, E/CS DATA BEFORE APPROVAL FOR RESIDUE STUDY TO E/CS DATA ONGOING:02/24/sb; Per meeting with KI-chem, status changed from "E/CS ongoing" to "Under Evaluation", ECS work is complete 06/25/ds; Flumioxazin is EPA GREEN & Pyroxasulfone is EPA CAUTION:08/25;

### Efficacy/Crop Safety (E/CS) Data Required:

NEED 4 E/CS TRIALS, ALL DONE IN ONE YEAR SHOULD BE FINE:04/22; MFG SUGGESTS SETTING UP E/CS PROTOCOL LIKE THE TOMATO/PEPPER PROTOCOL - 3, 4.5 AND 6 OZ/A. APPLIED TWICE TO ROW MIDDLES. 30-DAY INTERVAL. BEGINNING WHEN WEEDS ARE 2-4" TALL. NO CONTACT WITH CROP ALLOWED:07/20

## **Nomination Justification:**

(2019 MD) DE has 24C for Flumioxazin. There is some concern about crop injury in flooded conditions when water and/or soil particles are carried onto plastic mulch. DE and NJ would like to explore possibility to conduct a performance trial to look at use under flooded conditions.;(2020 FL) Dual ai product gives a broad spectrum of weed control; need for effective products to control weeds in strawberry row middles.;(2021 CA) See previous;(2021 FL) See previous comments.;(2022 MD) see database comments. Flumioxazin is labeled. This would be looking at Pyroxasulfone.;(2022 CA) See previous;(2022 MI) same;(2022 FL) See previous comments.;(2023 MI) See Prev;(2023 CA) Same;(2023 MD) See previous comments;(2023 FL) See previous comments.;(2025 MI) See Prev;(2025 NJ) See previous comments;

#### **IPM Comments from PCR:**

PER REQUESTOR: VERY GOOD IPM FIT; MANY GROWERS ALREADY RELY ON FLUMIOXAZIN AND THIS PRODUCT GIVES A BROADER SPECTRUM OF CONTROL; ALSO A GOOD FIT FOR RESISTANCE MANAGEMENT:07/18; VERY GOOD FIT: SAME: WSR; VERY GOOD FIT: SEE PREV COMMENTS: NER; VERY GOOD FIT: SEE PREV COMMENTS: SOR

#### **IPM Comments from Nomination Process:**

; Good Fit: This approach perfectly aligns with integrated weed management strategies by reducing reliance on a limited number of herbicide modes of action:: Thierry Besancon



Weed Science

FIOJE						
BATTS	Vinson, Edgar	P24-ALP02	RECD	NONE	Two applications of Fierce EZ at 6, 9, or 12 fl oz/a applied as hooded/shielded spray between plastic mulch beds of 'Camino Real' strawberries. Applications were made 17 and 49 days after transplanting (DAP). Treatments also included Prowl H2O (pendimethalin) applied at 3 pt/a 17 DAP. Strawberry plant size from all Fierce treatments was significantly higher than the control and Prowl treatments approximately 3 weeks after first harvest. Compared to the control and Prowl treatments, total marketable yield and individual fruit weight was increased, often significantly, by Fierce. Plant size, yield and berry weight increases may be due to reduction of ryegrass biomass growing between beds from Fierce treatments.	
BATTS	Boyd, Nathan	P24-FLP01	RECD	NONE	Two applications of Fierce EZ at 6, 9, or 12 fl oz/a applied as hooded/shielded spray between plastic mulch beds of 'Medallion' strawberries growing in a Myakka fine sand. Applications were made 13 and 43 days after transplanting. Treatments also included Chateau (flumioxazin) applied at 3 oz/a on the same days as Fierce. All herbicide treatments included Gramoxone (paraquat) to assist with emerged weeds. Good to excellent weed control from all treatments through 30 days after the second application, at which time complete control was seen. Crop injury from herbicide treatments was significantly higher than the weed-free nontreated. Injury from Fierce treatments was not different from the Chateau standard. Yield from Fierce treatments ranged from 94 to 136% of the weed-free nontreated. Yield from Chateau was highest in the trial at 165% of the weed-free nontreated.	
BATTS	Vollmer, Kurt (MD)	P24-MDP01	RECD	NONE	Two shielded applications of Fierce EZ made to bed middles of 'Ruby June' strawberries growing in a silt loam soil. Applications made at 6, 9 or 12 fl oz/a and approximately 30 days apart, beginning when weeds reached 2 to 4 inches. No crop injury observed, regardless of application rate or timing. Mouse-ear chickweed and henbit were completely controlled by all treatments 30 days after second application (DAP-2). Shepard's purse control ranged from 44 to 84% 30 DAP-2, with an apparent rate response. No yield data was required for this trial.	
BATTS	Performance Summary	P24-HQ-SUM	RECD	NONE	SUMMARY OF IR-4 PRODUCT PERFORMANCE PREPARED BY RBB. INCLUDES DATA FROM FT ID#s 24-ALP02, 24-FLP01, AND 24-MDP01. FORWARDED TO VALENT:12/24	

Date: 9/2/2025



Weed Science Date: 9/2/2025

**PROJECT STATUS** 

PR# CHEMICAL (MFG) COMMODITY (CROP GROUP)

\* STRAWBERRY (ANNUAL) (13-07G=LOW GROWING BERRY SUBGROUP)

RESEARCHABLE, ONLY RESIDUE DATA NEEDED

**REQ STATES** 

Reasons for need: WEEDS;

TERBACIL (TKI)

Α

NorthCentral Region

A Western Region

**Reduced Risk** 

**HQ AR** 

#### **PCR Use Pattern:**

NorthEast Region

13846

from A8959 - 0.2 LB AI/A; 30-45 DAY PHI

# **HQ Comments:**

From A8959 - PRE-UNDER MULCH; CURRENT LABEL IS 110-DAY PHI, THIS REQUEST IS TO LOWER THE LABELED PHI & FOR FL ONLY:10/03; STUDY 08959 CANCELED, AND REPLACED WITH STUDY A8959; SUBMISSION ON HOLD UNTIL SEVERAL REGISTRANT STUDIES ARE COMPLETED/SUBMITTED TO EPA:08/14:07/24/sb; A final rpt was signed under PR# A8959 (with 2004 trial data). This PR# was created in order to conduct add'l residue trials for submission, if there is still a need:07/24/sb; TKI supports as Researchable, Only Residue Data Needed:08/24/sb; EPA GREEN:08/25;

**Southern Region** 

# **Nomination Justification:**

(2024 FL) See requestor comments; (2025 FL) See previous comments.; (2025 MD) see previous comments;

## **IPM Comments from PCR:**

Unknown fit-SOR:08/24;

## **IPM Comments from Nomination Process:**

; Unknown: : Kristen Searer-Jones; Good Fit: see previous comments: Megan James Hickman



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13680 \*

TRICLOPYR (ADAMA, CORTEVA, HELENA)

\* CRANBERRY (13-07H=LOW GROWING BERRY SUBGROUP, EXCEPT STRAWBERRY)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR RESIDUE STUDY

**REQ STATES** MA OR NJ WA

**Reasons for need:** 

Woody weeds, hard to manage perennial weeds; The only other tool available for this use in cranberry is glyphosate. The industry is seeking alternatives for resistance management and also in the event glyphosate use is lost. In addition, triclopyr can be used on dormant weeds and this will enable growers to expand their weed management season by months:07/23; NJ/ Ongoing field trials; efficacy of triclopyr on dormant perennial weeds (maple tree, greenbrier, dewberry) would allow for postharvest or spring wiping when cranberry crop is dormant, reducing the risk of crop injury and yield losses due to foot/equipment traffic:08/23

NorthEast Region

Α

NorthCentral Region

**Southern Region** 

Western Region

Α

Reduced Risk

#### PCR Use Pattern:

Make one wiper application of 25% (v/v) formulated product approximately 30 days prior to harvest. Add crop oil concentrate for woody weeds. Add NIS for non-woody weeds. Do not allow solution to contact crop.

# **HQ Comments:**

X-ref 07339 from 1998, that reflects a status of "mfg will not support" from 2004. This new request was assigned this new PR#, and will be forwarded to mfg for a current review. Also," the requester will have preliminary data to share in October 2023":07/23; Mfg supported at 2023 FUW as Potential: E/CS Data Before Approval for Residue:09/23/sb

#### **Nomination Justification:**

(2023 CA) same; (2023 MD) See previous comments; (2024 MI) See prev; (2024 MD) see previous; (2024 NJ) Very important to get access to an alternative to glyphosate for control of perennial weeds through wiping. No other options than herbicide are currently available in cranberry; (2025 MD) see previous comments; (2025 CA) same; (2025 NJ) See previous comments; (2025 MA) Managing woody perennial weeds in a woody perennial crop is extremely challenging. The only tool available is glyphosate, ad it can only be used on actively growing weeds. Triclopyr is extremely effective when used as a spot treatment and can also be used on dormant weeds.;

#### **IPM Comments from PCR:**

Per Requester: Very Good Fit; This herbicide would be applied using a wick-wiper or sponge and this will allow growers to do very targeted spot treatments. Only the target weed would be in contact with the herbicide, so very little if any off target contact (including no direct contact with crop itself). A very small amount of product could be used to treat acres of crop area with this application method. In addition, this herbicide has been demonstrated to work on dormant woody weeds (wiping product on stems) and this will allow growers to do woody weed management in early spring, fall, or winter months when the crop is not actively growing:07/23; VGF-WSR; VGF-NER; VGF-NCR & NER:08/24; NJ:VGF-new moa for cranberry; no residue detected so far on fruits that have been analyzed by ocean spray with 30 d phi:08/24;

### **IPM Comments from Nomination Process:**

; Very Good Fit: see previous comments: Megan James Hickman; Good Fit: This approach perfectly aligns with integrated weed management strategies by reducing reliance on a limited number of herbicide modes of action:: Thierry Besancon; Very Good Fit: Will be used as a spot treatment applied as a wick wiper application directly to weed, so very little a.i. can effectively treat a large area.: Katherine Ghantous



Project				Weed Science	Date: 9/2/2025
	Ghantous, Katherine	P23-MA-DMP	RECD	NONE	Trycera herbicide applied at 25% v/v at different timings as a wiper treatment to perennial weeds, shrubs, and trees that were at least 6" taller than 'Stevens' cranberry. Trycera applied to dormant, per-bloom or post-bloom cranberry. Good to excellent weed control treated weeds seen from all three timings, with complete and near-complete control from dormant and pre-bloom timings. No crop injury from dormant timing and only minor, localized injury from later timings. Residue analysis from three sites (MA, NJ, WI) showed no detectable residues in cranberry fruit from the two early timings.
	Besancon, Thierry	P23-NJ-DMP	RECD	NONE	Trycera herbicide applied at 25% v/v, as a wiper treatment, to red maples 40 days prior to cranberry harvest or post-harvest. Minor, localized crop injury and complete maple control 30 days after the pre-harvest timing. Minimal crop injury and good to excellent maple control from post-harvest timing. Complete maple control seen from both timings in spring 2024 evaluation.
	Ghantous, Katherine	P24-MA-DMP	RECD	NONE	Over two years, Trycera herbicide applied at 25% v/v or Vastlan at 20% v/v was applied different timings as a wiper treatment to perennial weeds, shrubs, and trees that were at least 6" taller than 'Stevens' cranberry. Triclopyr applied to dormant, per-bloom or post-bloom cranberry. Good to excellent weed control treated weeds seen from all three timings, with complete and near-complete control from dormant and pre-bloom timings. No crop injury from dormant timing in either year and only minor, localized injury from later timings. Residue analysis from three 2023 sites (MA, NJ, WI) showed no detectable residues in cranberry fruit from the two early timings. Late summer 2024 evaluation revealed that winter dormant timing was more effective than spring dormant timing.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13956 1-AMINOCYCLOPROPANE-1-CARBOXYLI C ACID (ACC) (VALBIO) \* PECAN (14-12=TREE NUT GROUP)

**UNDER EVALUATION** 

Reasons for need:

There is excessive yield and quality loss from delayed pecan harvest. It is also prohibitively expensive for multiple harvest passes compared to low commodity prices for pecans. Nut loosening to ensure a one time early harvest will be one of the keys for sustainability in pecan farming. Nut loosening prior to harvest to improve nut removal with a one pass shake/harvest. Warm fall/winter temperatures are causing delays in pecan nut maturity and harvest. We have historically relied on a hard freeze in AZ, NM & TX to begin harvest. current weather patterns are not conducive for timely harvest. We are waiting to harvest and experiencing further delays with the onset of winter rains. Nut quality degrades rapidly as harvest is prolonged:05/25;

REQ STATES AZ

NorthEast Region

**NorthCentral Region** 

**Southern Region** 

Western Region

Α

Reduced Risk

## **PCR Use Pattern:**

Apply Accede at 1200 ppm in 100 gallons of water per acre approximately 7 days prior to mechanical agitation of pecan trees, to help loosen nuts and improve harvest efficiency. See Accede label for further application guidance.

#### **HQ Comments:**

Key Export Markets: Canada, Asia, Europe. Phytotoxicity is unknown at this time 05/25/ds; EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Very good fit into current cultural and IPM practices. Will really help reduce naval orange worm and pecan nut casebearer associated with delayed harvest due to weather delays and multiple harvest passes:05/25;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

03179

ETHEPHON (ADAMA, UPL NA)

\* PECAN (14-12=TREE NUT GROUP)

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

**REQ STATES** 

Reasons for need:

OLD REQUEST WAS FOR USE AS A HARVEST AID; NEW REQUEST IS FOR USE AS AN AID IN UNIFORM HUSK SPLIT TO ADANCE HARVEST TO AVOID BEGINNING OF RAINY SEASON:09/16; AZ-Increased acreage of pecans is areas where early harvest is needed to avoid rainy season (AZ, NM, TX) has increased the need for this use:10/24; AZ-Early uniform husk split will also reduce vivipary in warm climate pecan growing areas (south central AZ) preventing substantial quality issues and lost revenue:05/25; CA- issues with stick tights and blacks waiting for a freeze and this product would allow us to avoid that:05/25;

NorthEast Region

**NorthCentral Region** 

**Southern Region** 

Western Region

Α

**Reduced Risk** 

TX CA OK AZ

#### **PCR Use Pattern:**

1 FOLIAR APPLIC OF  $\sim$ 600 PPM, AT 10% SHUCK SPLIT; RATE, TIMING, ETC., REQUIRE FURTHER RESEARCH, BUT MUST BE APPLIED IN COMBINATION WITH 300 PPM NAA TO REDUCE DEFOLIATION; SHOULD NOT BE APPLIED ON LOW-VIGOR OR STRESSED TREES; SPRAY WHEN TEMP IS BETWEEN 60-90 DEGREES F:09/16

# **HQ Comments:**

OLD REQUEST MFG DID NOT SUPPORT:07/87; IS AN EPA HOLD:09/16; MFG RECONSIDERING SUPPORT:05/17; EPA HOLD:09/18; MADE UNDER EVAL FOR EPA REASSESSMENT:07/19; EPA HOLD OF 08/19 CHANGED TO EPA CAUTION:09/19; ADAMA SUGGESTS HOLD:05/20; EPA HOLD:08/20; UPL REQUESTED THE STATUS BE CHANGED TO RESEARCHABLE, RESIDUE AND E/CS DATA NEEDED: VP, 3/23; YELLOW 08/23; EPA HOLD CAUTION:08/24/sb; Early harvest will maintain nut quality & reduce naval orange worm that would feed on delayed harvested nuts and Ethephon may result in foliar injury:09/24/sb; EPA (HOLD) CAUTION:08/25;

#### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

PER REQUESTOR 09/16: NO EXPECTED IMPACT ON IPM PROGRAMS

### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG) COMMODITY (CROP GROUP) PROJECT STATUS

13976 DIFLUFENICAN + FLUFENACET (BAYER) HAZELNUT (FILBERT) (14-12=TREE NUT GROUP) HOLD

Reasons for need: Annual grasses and broadleaves. Annual bluegrass resistance to preemergence herbicide pendimethalin and REQ STATES OR

indaziflam was documented in Oregon:06/25;

NorthEast Region NorthCentral Region Southern Region Western Region A Reduced Risk

#### **PCR Use Pattern:**

Make one application of Cadou SC at 6.85 fl oz/a to soil and across lower 3' of hazelnut trunks for residual weed control. Do not apply within 60 days of harvest. Requester added 60d PHI, after being asked about PHI, but also stated that the application will likely be made in fall/winter for best results.

#### **HQ Comments:**

Key Export Markets: EU, Asia, Canada; Diflufenican is GREEN & Flufenacet is EPA CAUTION:08/25; Bayer has asked this status be updated from Under Eval to (Mfg) HOLD at this time:08/25/sb;

#### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Commercial pre-mix of group 12 & 15, both under utilized modes of action in tree nut orchards:06/25;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

13973 HALAUXI

HALAUXIFEN-METHYL+FLORASULAM (CORTEVA)

HAZELNUT (FILBERT) (14-12=TREE NUT GROUP)

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

Reasons for need:

Prostrate knotweed, smart weed, annual broadleaves, suppression of field bindweed. No effective POST emergence options to control prostrate knotweed in hazelnuts. The plants entangle with the sweepers creating operation problems

**REQ STATES** OR

during harvest:06/25;

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

**Reduced Risk** 

### **PCR Use Pattern:**

Comprehensive use pattern: Apply Quelex at 0.75 oz/a three times per year, approximately 30 days apart, with the last application no closer than 60 days before harvest. Applications will be post-directed to the soil and across the lower 3' of the hazelnut trunks.

# **HQ Comments:**

Key Export Markets: EU, Asia, Canada; HALAUXIFEN-METHYL IS EPA PENDING & FLORASULAM IS GREEN:08/25; Corteva supports as Researchable, Res & E/CS Data Needed:08/25/sb;

# **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; New option to control this weed (management gap) Pre-mixture - reducing resistance selection:06/25;



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

COMMODITY (CROP GROUP)

PROJECT STATUS

13140 \*

S-METOLACHLOR/METOLACHLOR (SYNGEN, UPL NA)

INTERMEDIATE WHEATGRASS (15-22A=WHEAT SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need: GRASSY WEEDS; GRASSY WEEDS CAN BE PROBLEMATIC DURING ESTABLISHMENT; ONCE THE CROP HAS EMERGED, THERE ARE ALMOST NO POST-EMERGENCE GRASS CONTROL OPTIONS; PER WY ME-TOO REQUEST: THIS REQUESTED USE IS ESSENTIAL TO ESTABLISHING PERENNIAL WHEATGRASS STANDS AND PREVENTING TOTAL LOSS OF GRAIN/SEED PRODUCTION IN THE ESTABLISHMENT YEAR

**REQ STATES** 

SD MN WY KS IA NE

ND OH

NorthEast Region

**NorthCentral Region** 

**Southern Region** 

**Western Region** 

Reduced Risk

## **PCR Use Pattern:**

MAKE 1 BROADCAST TO THE SOIL APPLIC OF 3 PT/A: APPLY BROADCAST TO THE SOIL BEFORE PLANTING OR AFTER PLANTING BUT PRIOR TO EMERGENCE: NEEDS RAINFALL TO INCORPORATE

# **HQ Comments:**

NO KEY EXPORT MARKET NOTED: THERE IS NO WHEAT OR BARLEY TOLERANCE FOR EXTRAPOLATION TO WHEATGRASS: THE DUAL MAGNUM LABEL ONLY MENTIONS WHEAT, BARLEY, OATS AND RYE AS ROTATIONAL CROPS WITH A 4.5 MONTH PLANTBACK INTERVAL:08/20; SYNG SUPPORTS, CROP SAFETY DATA NEEDED BEFORE APPROVAL FOR RESIDUE WORK (CONCERNS THAT S-MOC WILL KILL WHEATGRASS):09/20

#### **Nomination Justification:**

(2020 MI) GRASSY WEEDS; GRASSY WEEDS CAN BE PROBLEMATIC DURING ESTABLISHMENT. ONCE THE CROP HAS EMERGED, THERE ARE ALMOST NO POST-EMERGENCE GRASS CONTROL OPTIONS;(2023 MI) See Prev;(2024 MI) See Prev;(2025 MI) See Prev;

### **IPM Comments from PCR:**

PER REQUESTER: VERY GOOD IPM FIT; DIVERSIFYING CROP ROTATIONS WITH INTERMEDIATE WHEATGRASS PROMOTES IPM:08/20; VGF-NCR:08/24;

Wyse, Donald L.

P17-MN-DMP

RECD

NONE

DUAL II MAGNUM AT 1.5 OR 3 PT/A PRE: LITTLE TO NO CROP EFFECT



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

13738 \*

SULFOSULFURON (VALENT)

INTERMEDIATE WHEATGRASS (15-22A=WHEAT SUBGROUP)

NEED E/CS DATA ONLY

Reasons for need:

Selective herbicide for certain annual and perennial grasses and broadleaf weeds; Lack of products labeled for intermediate wheat grass, makes adoption of new crop much more difficult for producers. Large amount of interest around intermediate wheat grass for different uses:08/23

REQ STATES (

CO SD

NorthEast Region

NorthCentral Region

Α

**Southern Region** 

Western Region

**Reduced Risk** 

#### **PCR Use Pattern:**

USE OUTRIDER HERBICIDE. FOLLOW CURRENT LABELED INSTRUCTIONS FOR WHEAT, MAKE ONE FOLIAR BROADCAST APPLICATION AT 0.67 OZ PRODUCT/A PER YEAR. IN ESTABLISHMENT YEAR MAKE APPLICATION AFTER CROP REACHES 2-LF STAGE. IN SUBSEQUENT YEARS MAKE APPLICATION WHEN NEW REGROWTH REACHES 5-LF STAGE. DO NOT APPLY WITHIN 30 DAYS OF CUTTING HAY OR WITHIN 55 DAYS OF GRAIN HARVEST.

# **HQ Comments:**

Per Mfg, this is researchable as "Potential: E/CS Data Before Approval for Residue:08/23/sb; Valent now supports as Need E/CS Data Only:05/24/sb

### **Nomination Justification:**

(2023 CA) Same; (2024 MI) See Prev; (2025 MI) See Prev;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Good fit because adding addition crops to systems lacking diversity can improve IPM. Useful due to lack of narrowleaf control for intermediate wheat grass which makes managing pest difficult. More options herbicide options allows producers to have a safety net when other IPM steps are not as effective:08/23; VERY GOOD FIT: INTERMEDIATE WHEATGRASS CAN BE USED AS A ROTATIONAL COVER CROP, BUT NARROWLEAF IS DIFFICULT TO CONTROL. THIS PROVIDES AN OPPORTUNITY FOR CONTROL.: WSR; VGF-NCR:08/24:



Weed Science Date: 9/2/2025

PR#

**CHEMICAL (MFG)** 

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13258 \*

NAPROPAMIDE (UPL NA)

QUINOA (15-22A=WHEAT SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

MANY HERBICIDES CAUSE UNACCEPTABLE CROP INJURY. DEVRINOL HAS SHOWN THE BEST CROP SAFETY OF THOSE TESTED IN THE FIELD; OR/Lack of available herbicides to control weed pressure in quinoa:08/23; ID:

**REQ STATES** ID OR

Weeds can cause total yield loss in quinoa. This will help control weeds and protect crop yields:07/25;

**NorthEast Region** 

NorthCentral Region

**Southern Region** 

Western Region

Α

**Reduced Risk** 

PCR Use Pattern:

DEVRINOL; 1-2 POUND(S) AI PER ACRE AS PRE-EMERGENCE, BROADCAST; ONE APPLICATION; PHI IS UNKNOWN;

**HQ Comments:** 

EPA (HOLD) CAUTION: 08/21; 2023 FUW comment was that e/cs ongoing in "IS" and request was to follow-up with registrant to see if status can be updated to residue only now:09/23/sb

**Nomination Justification:** 

(2021 CA) See previous;(2022 CA) See previous;(2023 CA) Same;(2024 CA) same as above;(2025 CA) same;

**IPM Comments from PCR:** 

PER REQUESTOR GOODFIT; THIS PRODUCT HAS GOOD EFFICACY AND LOW CROP INJURY. WE HOPE TO MANAGE AGAINST HERBICIDE RESISTANCE, BY USING A MORE EFFECTIVE HERBICIDE, THUS RESULTING IN LESS HERBICIDE TREATMENTS; GOOD FIT: SAME: WSR

Hutchinson, Pamela J.S.

P20-ID-DMP

RECD

DEVRINOL AT 1, 2 AND 4 LB PROD/A PRE; GOOD CROP SAFETY.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

12931 QUIZALOFOP (AMVAC, GOWAN)

BUCKWHEAT (15-22B=BARLEY SUBGROUP)

RESEARCHABLE, ONLY RESIDUE DATA NEEDED

**REQ STATES** 

Reasons for need:

GRASS WEEDS; BETTER GRASS CONTROL, INCREASE AVAILABILITY OF PESTICIDE OPTIONS; PER ND ME-TOO REQUEST 07/20: GROWERS IN MN/ND ARE DESPARATELY LOOKING FOR ALTERNATIVE HERBICIDES SO THEY HAVE MORE THAN ONE FOR EFFICIENT WEED CONTROL WITHOUT RESISTANCE DEVELOPING; PER ND ME-TOO REQUEST 08/20: THERE IS A HIGH DEMAND FOR NEW CHEMICALS FOR USE IN BUCKWHEAT FOR BROADLEAF AND GRASSY WEEDS; SOLUTIONS ARE NEEDED, OR BUCKWHEAT PRODUCTION COULD DISAPPEAR; WA: Production of one registered grass herbicide (Poast) for buckwheat has ceased. Registration of this herbicide (quizalofop) will provide buckwheat growers with an important option for weed control:08/25:

NorthEast Region

NorthCentral Region

Southern Region

Western Region

Α

Reduced Risk

ND ND WA

#### **PCR Use Pattern:**

USE ASSURE II; MAKE 2 FOLIAR APPLIC OF 0.66-1.32 OZ AI/A; RE-TREATMENT INTERVAL 14 DAYS; 60-DAY PHI (RANGE COULD BE 15-120, DEPENDING ON CROP); APPLY IN 10-25 GPA WITH AN OIL ADJUVANT AT 1.5-2 PT/A TO WEEDS IN 4-LEAF STAGE OR SMALLER, TO CROP FROM EMERGENCE TO ONSET OF FLOWERING; DO NOT APPLY THROUGH IRRIGATION

#### **HQ Comments:**

SPECIFICALLY, "TAME" BUCKWHEAT; NO KEY EXPORT MARKETS NOTED; MAY BE ABLE TO EXTRAPOLATE TOLERANCE FROM EXISTING TOLERANCES ON BARLEY (0.05 PPM ON BARLEY GRAIN, HAY AND STRAW):11/19; REQUESTER IS WITHDRAWING REQUEST AND A NEW REQUEST WILL BE SUBMITTED FOR A DIFFERENT CHEMICAL:01/20; PER IR-4 DISCUSSION WITH INTERESTED STAKEHOLDERS, STATUS WAS CHANGED BACK TO RESEARCHABLE; THERE IS SOME CONCERN ABOUT WEED RESISTANCE TO QUIZALOFOP, BUT IF USE CAN BE ACHIEVED VIA EXTRAPOLATION FROM BARLEY TOLERANCES, IT WILL BE GOOD TO PURSUE THE USE:02/20; BARLEY TOLERANCES CAN BE USED TO SECURE TOLERANCE FOR BUCKWHEAT, BUT KEEP AS RESEARCHABLE TO SECURE EPA REVIEW AND ALLOW STAKEHOLDER PRIORITIZING:05/20; EPA GREEN: 08/20; AMVAC CONFIRMED NO E/CS DATA ARE NEEDED:05/21; EPA GREEN: 08/23; EPA CAUTION:08/24; this pr# will not be incl with Bundle 1201, so the bundle # was removed:04/25/sb; EPA CAUTION:08/25;

#### **Nomination Justification:**

(2020 MI)

GRASS WEEDS; BETTER GRASS CONTROL, INCREASE AVAILABILITY OF PESTICIDE OPTIONS; PER ND ME-TOO REQUEST 07/20: GROWERS IN MN/ND ARE DESPARATELY LOOKING FOR ALTERNATIVE HERBICIDES SO THEY HAVE MORE THAN ONE FOR EFFICIENT WEED CONTROL WITHOUT RESISTANCE DEVELOPING; PER ND ME-TOO REQUEST 08/20: THERE IS A HIGH DEMAND FOR NEW CHEMICALS FOR USE IN BUCKWHEAT FOR BROADLEAF AND GRASSY WEEDS; SOLUTIONS ARE NEEDED, OR BUCKWHEAT PRODUCTION COULD DISAPPEAR; (2023 MI) See Prev; (2024 MI) See Prev; (2025 MI) See Prev; (2025 CA) same;

### **IPM Comments from PCR:**

PER REQUESTER: GOOD IPM FIT; RESISTANCE MANAGEMENT OPTION, FITS CULTURAL PRACTICES, COMPLEMENTS CULTURAL AND MECHANICAL CONTROL:11/19; GF-NCR:08/24;

Dalley, Caleb

P20-ND-DMP

RECD NONE

Quizalofop applied at 0.9 or 1.8 oz ai/a over buckwheat at 4-6 lf stage, budding stage, or full bloom stage. High rate not applied at bloom stage. No injury, regardless of rate or timing. No yield reductions from any treatment.



Weed Science Date: 9/2/2025

Dalley, Caleb	P22-ND-DMP	RECD	NONE	Quizalofop applied at 0.9 or 1.8 oz ai/a over buckwheat at 29, 40 or 50 days after planting (DAP). High rate not applied at 50 DAP. No injury, regardless of rate or timing. No yield reductions from any treatment.
Howatt, Kirk	P20-ND-DMP	RECD	NONE	Quizalofop applied at 0.9 or 1.8 oz ai/a over buckwheat at 4-6 lf stage, budding stage, or full bloom stage. High rate not applied at bloom stage. No injury, regardless of rate or timing. No yield reductions from any treatment.
Howatt, Kirk	P20-ND-DMP	RECD	NONE	Quizalofop applied at 0.9 or 1.8 oz ai/a over buckwheat at 4-6 lf stage, budding stage, or full bloom stage. High rate not applied at bloom stage. No injury, regardless of rate or timing.
Howatt, Kirk	P22-ND-DMP	RECD	NONE	Quizalofop applied at 1.3 or 2.6 oz ai/a over buckwheat at 6-7 lf stage or at 20% bloom stage. No injury, regardless of rate or timing. No yield reductions from any treatment.
 Howatt, Kirk	P23-ND-DMP	RECD	NONE	Quizalofop applied at 1.3 or 2.6 oz ai/a over 12-15" buckwheat or at 75% bloom stage. No injury, regardless of rate or timing. No yield reductions from any treatment.
Jenks, Dr. Brian	P20-ND-DMP	RECD	NONE	Assure II applied at 8 or 16 fl oz/a (0.055 or 0.11 lb ai/a) over buckwheat approximately 4 weeks after planting. No injury or yield reductions seen from either treatment.
 Jenks, Dr. Brian	P22-ND-DMP	RECD	NONE	Quizalofop applied at 1.3 or 2.6 oz ai/a over buckwheat at 6-7 lf stage or at 20% bloom stage. No injury, regardless of rate or timing. No yield reductions from any treatment.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13936 AMICARBAZONE (ARYSTA)

\* CORN (SWEET) (15-22D=CORN (SWEET) SUBGROUP)

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

Reasons for need:

WEEDS; pigweeds, lambsquarter, crabgrass Alternative to atrazine. Alternative to atrazine can potentially reduce the negative environmental effects of atrazine use:04/25;

**REQ STATES** OR

NorthEast Region

NorthCentral Region

Southern Region

Western Region

Α

Reduced Risk

#### **PCR Use Pattern:**

Make up to two broadcast applications of amicarbazone 70 WDG preplant or preemergence to sweet corn. If two applications are made, applications should not exceed 5.0 oz/a and should be ~14 days apart, with the second application made prior to sweet corn emergence. If one application is made, do not exceed 10.25 oz/a per year. Regardless of the number of applications, do not exceed 10.25 oz/a per year.

#### **HQ Comments:**

DMP "ony" XH177 converted to PR# 13936 with request received 04/25. Key Export Markets: Canada, Mexico, Japan, South Korea, EU, Phillipines, Taiwan, Guatemala, Saudi Arabia, Australia. No UPL solo amicarbazone products are currently marketed for food crops in the US:04/25; Status changed from "Under Eval" to "Researchable, Residue & ECS" 05/25/ds; EPA CAUTION:08/25;

#### **Nomination Justification:**

(2025 CA) same; (2025 FL) See previous comments.;

#### **IPM Comments from PCR:**

Per requester: Very Good Fit; Amicarbazone can serve as an alternative to atrazine. Amicarbazone can be used at lower rates than atrazine and achieve same results while providing a good weed control selectivity (Dayan et al. 2009). Amicarbazone has lower soil persistence than atrazine and can allow for more diverse crop rotations (Mueller and Henry 2024). Environmental toxicity and effects are potentially less detrimental than atrazine. Dayan, F. E., Trindade, M. L., & Velini, E. D. (2009). Amicarbazone, a new photosystem II inhibitor. Weed Science, 57(6), 579-583. Mueller, T. C., & Henry, R. S. (2024). Amicarbazone and other Group 5 herbicide behavior in soil under field and laboratory conditions. Weed Technology, 38, e63. Korshun, M., Mart?ianova, Y., & Korshun, O. (2021). Ecotoxicological hazard assessment of triazolone herbicide amicarbasone:04/25;

NONE

#### **IPM Comments from Nomination Process:**

; Very Good Fit: See previous comments.: Kristen Searer-Jones

Bellinder, Dr. Robin

P04-NY-DMP

RECD

\_

0.056 PRE AND 0.112 LB AI/A POST; EXCELLENT CROP TOLERANCE.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14009 BICYCLOPYRONE + BROMOXYNIL

(SYNGEN)

GRASSES (SEED CROP) (17=GRASS FORAGE, FODDER AND HAY GROUP)

**UNDER EVALUATION** 

Reasons for need:

Mayweed chamomile (Anthemis cotula L.), other broadleaf weeds. Difficult weed to control with existing registered products. Combines two modes of action for resistance management. Per label: "Powered by bicyclopyrone and bromoxynil octanoate, two active ingredients with two effective modes of action, Talinor overpowers tough-to-control weeds like kochia, mayweed chamomile and Russian thistle with quicker, more efficient knockdown:06/25:

REQ STATES OR

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

Reduced Risk

## **PCR Use Pattern:**

Make one foliar broadcast application at 13.7 to 18.2 fl oz/a, approximately 60 days prior to cutting for hay. Applications must include CoAct+ adjuvant and COC. See Talinor label for appropriate rates of each.

# **HQ Comments:**

Requester specifically mentioned Tall Fescue, Perennial ryegrass, and further noted Grass Forage, Fodder and Hay Group for the entire crop group, so "Grasses" will cover this:06/25;sb; Bicyclopyrone is GREEN & Bromoxynil is EPA CAUTION:08/25; the new pcr comodity was grasses, however the requester clarified the intent of the new pcr was for Grasses (Seed Crop), so the commodity was updated accordingly & Syngenta has been advised:08/25/sb;

#### **Nomination Justification:**

(2025 CA) same;

#### **IPM Comments from PCR:**

Per Requester: Good Fit; Provides two modes of action, helps with resistance management. Can combat weeds resistant to ALS-inhibitor, synthetic auxin, and glyphosate:06/25;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: same: Kari Arnold



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13185 \*

PRONAMIDE (CORTEVA)

\* CANOLA (20A=RAPESEED SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR RESIDUE STUDY

**REQ STATES** 

Reasons for need:

GRASS WEEDS, SPECIFICALLY ITALIAN GRASS; IN WINTER CANOLA PRODUCTION REGIONS OF THE U.S., ITALIAN RYEGRASS AND GRASS WEEDS GENERALLY ARE BECOMING LESS SENSITIVE AND IN MANY CASES RESISTANT TO MULTIPLE HERBICIDES; SEVERAL DIFFERENT HERBICIDE GROUPS WITH DISTINCT MODES OF ACTION REGISTERED FOR CANOLA, INCLUDING GLYPHOSATE, HAVE EXHIBITED PARTIAL OR COMPLETE LOSS OF EFFICACY; PRONAMIDE WOULD PROVIDE A MUCH-NEEDED, ALTERNATIVE MODE OF ACTION TO ENABLE CONTROL OF ITALIAN RYEGRASS AND OTHER GRASS WEEDS IN WINTER CANOLA AND PROVIDE A HERBICIDE STEWARDSHIP OPPORTUNITY FOR GROWERS TO DELAY THE ONSET OF RESISTANCE TO CURRENTLY REGISTERED CHEMISTRIES; AN ADDITIONAL AND NOVEL USE OF PRONAMIDE THAT IS BEING CONSIDERED IS ITS USE AS AN EARLY PRE ON SPRING CANOLA ACRES TO MITIGATE OVERWINTERING GRASS WEED POPULATIONS WHICH FOR MULTIPLE REASONS CAN BE DIFFICULT TO CONTROL EFFECTIVELY IN THE SPRING WITH GLYPHOSATE OR FOP/DIM CHEMISTRIES; THE TANGIBLE ECONOMIC BENEFIT OF CANOLA TO PRODUCERS IS EXTREMELY SIGNIFICANT; AND THE IMPORTANCE OF HAVING EFFECTIVE WEED CONTROL OPTIONS IS CRITICAL TO CONTINUED DOMESTIC PRODUCTION OF CANOLA THAT COUNTERS THE U.S. SUPPLY DEFICIT IN EDIBLE CANOLA OIL AND THE ENORMOUS CANOLA MEAL REQUIREMENTS OF THE DAIRY SECTOR

A7 ID

NorthEast Region

**NorthCentral Region** 

**Southern Region** 

Western Region

Α

Reduced Risk

### **PCR Use Pattern:**

USE THE KERB PRODUCT; MAKE 1 FOLIAR APPLIC OF 0.75 LB AI/A, 180-DAY PHI; APPLY IN FALL OR EARLY WINTER, WHEN TEMPS DO NOT EXCEED 55 DEGREES, BUT PRIOR TO FREEZE-UP; RAIN, SNOW AND/OR IRRIGATION NEEDED TO MOVE THE PRODUCT INTO THE ROOTING ZONE OF GERMINATING WEEDS

# **HQ Comments:**

NO KEY EXPORT MARKET NOTED; THERE ARE NO TOLERANCES FOR PRONAMIDE IN CROP GROUP 20:11/20

### **Nomination Justification:**

(2021 CA) See previous;(2022 CA) See previous;(2023 CA) same; (2025 CA) same, needed for mustard;

#### **IPM Comments from PCR:**

PER REQUESTER: VERY GOOD FIT; PRONAMIDE WOULD PROVIDE A NEW AND DIFFERENT MODE OF ACTION TO CONTROL RESISTANT ITALIAN RYEGRASS IN CROP ROTATIONS WITH CANOLA, AND POTENTIALLY REDUCE OVERALL HERBICIDE APPLIC; CROP AND CHEMICAL ROTATION ARE KEY COMPONENTS OF A SUCCESSFUL IPM PROGRAM; INCLUDING CANOLA TO DIVERSIFY TRADITIONAL WHEAT/CEREAL-ONLY ROTATIONS HAS PROVEN SUCCESSFUL, AND THE AVAILABILITY OF PRONAMIDE TO EFFECTIVELY CONTROL GRASS WEEDS THAT ARE RESISTANT TO HERBICIDES CURRENTLY REGISTERED FOR USE IN CANOLA WOULD PROVIDE A VALUABLE TOOL FOR GROWERS TO MAINTAIN SUCCESSFUL IPM PROGRAMS IN A WIDE GEOGRAPHIC RANGE: 11/20; VERY GOOD FIT: SAME: WSR

Davis, Jim B

P18-ID-DMP

RECD

NONE

PRONAMIDE 3.3SC AT 1, 2 AND 3 PT/A APPLIED TO ESTABLISHED CANOLA ON 10/25/16, AND SEEDED WITH WHEAT ON 10/4/17; NO INJURY AND YIELD EFFECT ON CANOLA; VISIBLE INJURY, WITH 15% YIELD REDUCTION, ON WHEAT ONLY AT 3 PT/A.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

11951 PYR

PYROXASULFONE (KICHEM)

SESAME (20A=RAPESEED SUBGROUP)

RESEARCHABLE, ONLY RESIDUE DATA NEEDED

Reasons for need:

WEEDS SUCH AS PIGWEED, JOHNSONGRASS, MORNING GLORY, CRABGRASS, KOCHIA, HORSEWEED; TX: Herbicide options, especially for broadleaf control, are limited in sesame. Our producers, especially those in the

REQ STATES TX OK NC

southeast are asking for this use pattern:07/25; NC: needs control of pigweed:08/25;

NorthEast Region

**NorthCentral Region** 

**Southern Region** 

Α

Western Region

Reduced Risk

#### **PCR Use Pattern:**

USE THE ZIDUA PRODUCT; MAKE 1 FOLIAR BROADCAST OVER-THE-TOP APPLIC OF 2 OZ/A; APPLY AT EARLY POSTEMERGENCE, WHEN SESAME IS AT 2-5 LEAF PAIRS STAGE (AT LESS THAN 2-LEAF PAIR STAGE HIGH LEVELS OF INJURY COULD OCCUR)

#### **HQ Comments:**

JAPAN IS A KEY EXPORT MARKET; NEEDED TO CONTROL PROBLEM WEEDS AFTER SESAME EMERGENCE, BUT PRIOR TO WEED EMERGENCE (SEE PR# 11723 FOR PREEMERGENCE USE AT A LOWER RATE); MFG NEEDS TO SEE PERFORMANCE/CROP SAFETY OF OVER-THE-TOP BROADCAST EARLY POSTEMERGENCE APPLIC BEFORE APPROVAL FOR RESIDUE WORK:07/16; MFG SUPPORTS, RESIDUE AND E/CS DATA NEEDED:10/12/16; MFG DECIDED MORE E/CS DATA ARE NEEDED BEFORE RESIDUE TRIALS, SO 2017 RESIDUE STUDY WILL NOT BE CONDUCTED:11/4/16; MFG MADE RESEARCHABLE, AND THE E/CS COMPONENT MAY BE DELETED PENDING MFG REVIEW OF EXTENSIVE PERFORMANCE DATA AVAILABLE; THIS POSTEMERGE USE PATTERN CAN COVER THE PREEMERGE/LOWER RATE USE PATTERN IN PR# 11723:07/18; MFG IS OK WITH PERFORMANCE DATA, AND ONLY NEEDS RESIDUE DATA:09/18; AT 2018 FUW, BASF CONFIRMED THEY DO NOT SUPPORT THIS USE, AS THE MARKETING PARTNER:09/18; WAS REPLACED BY PR# 12640, PYROXASULFONE + FLUMIOXAZIN, VIA A PRIORITY UPGRADE PROPOSAL:10/18; MFG RE-EXAMINING IF THIS CAN BE SUPPORTED:06/20; MFG NOW SUPPORTS THIS REQUEST AS POTENTIAL, AND WILL REQUIRE 3X RATE CROP SAFETY DATA BEFORE MAKING A DECISION ABOUT SUPPORTING RESIDUE WORK:07/20; STATUS UPDATED TO RESEARCHABLE, E/CS ON-GOING; RESIDUE DATA NEEDED:10/22; EPA GREEN: 08/23; E/CS DATA COMPLETE, STATUS CHANGED FROM "ECS ONGOING" TO "RESEARCHABLE, RES ONLY" 02/25/DS; EPA CAUTION:08/25;

#### Efficacy/Crop Safety (E/CS) Data Required:

PER MFG REVIEW OF EXTENSIVE PERFORMANCE DATA, ONLY RESIDUE DATA ARE NEEDED:09/18; PER MFG, 3X RATE CROP SAFETY DATA ARE REQUIRED:07/20

#### **Nomination Justification:**

(2016 FL) Useful as a layby application to control late germinating weeds. J.Rose, Sesaco.

;(2018 TX) Potential use by sesame growers for an additional, layby herbicide to control late germinating seeds.;(2018 FL) Growers have requested an option for residual pre emergent herbicide which can be broadcast applied post emergent to help maintain weeds; WEEDS SUCH AS PIGWEED, JOHNSONGRASS, MORNING GLORY, CRABGRASS, KOCHIA, HORSEWEED; USEFUL FOR CONTROLLING CERTAIN HERBICIDE RESISTANT WEEDS

;(2020 FL) See previous comment.;(2021 FL) See previous.;(2025 FL) See previous comments.;

#### **IPM Comments from PCR:**

PER REQUESTOR: GOOD FIT IN IPM; USEFUL FOR CONTROLLING CERTAIN HERBICIDE RESISTANT WEEDS; USE IS COMPATIBLE WITH OTHER PEST MANAGEMENT PRACTICES:07/16; PER 2016 NOMINATION COMMENT: USE PATTERN AS A POST SESAME, PRE WEED GERMINATION, POST ONLY:09/16; PER 2018 NOMINATION COMMENT: LOW LEACHING POTENTIAL;

#### **IPM Comments from Nomination Process:**

; Good Fit: See previous comments.: Kristen Searer-Jones



Weed Science Date: 9/2/2025

BATTS	Shankle, Mark W.	P15-MS-DMP	RECD	NONE	ZIDUA @ 2 OZ PROD/A POST AT 2 WEEKS OR 3 WEEKS AFTER PLANTING (WAP); NO SIGNIFICANT INJURY WHEN APPLIED 3 WAP; SLIGHT INJURY WITH COMPLETE RECOVERY BY 6 WEEKS POSTTREATMENT WHEN APPLIED 2 WAP.
BATTS	Baughman, Todd A (OK)	P14-OK-DMP	RECD	NONE	ZIDUA AT 2 OZ PROD/A POST APPLIED AT 4, 5 AND 6 WEEKS AFTER PLANTING (WAP); NO SIGNIFICANT INJURY WITH ALL TREATMENTS; SIGNIFICANT YIELD LOSS WITH 6 WAP, NONE WITH OTHER TREATMENTS.
BATTS	Hanson, Brad	P17-CAP33	RECD	NONE	ZIDUA 85WG AT 2 AND 3 OZ PROD/A APPLIED POST AT 3, 4 OR 5 WEEKS AFTER PLANTING (WAP), AND AT 3 OZ + COC APPLIED AT 4 WAP; 5 % INJURY, WITH QUICK RECOVERY, ONLY FROM 3 OZ + COC APPLIED AT 4 WAP. NO SIGNIFICANT YIELD DIFFERENCES BETWEEN TREATMENTS.
BATTS	Rose, Jack	P17-TXP01	RECD	NONE	ZIDUA 85WG AT 2 AND 3 OZ PROD/A APPLIED POST AT 3, 4 OR 5 WEEKS AFTER PLANTING (WAP), AND AT 3 OZ + COC APPLIED AT 4 WAP; UNACCEPTABLE INJURY ONLY FROM 3 OZ APPLIED AT 5 WAP AND 3 OZ + COC APPLIED AT 4 WAP. NO SIGNIFICANT YIELD DIFFERENCES BETWEEN TREATMENTS.
BATTS	Burgos, N.	P17-ARP01	RECD	NONE	ZIDUA APPLIED 3, 4, OR 5 WEEKS AFTER PLANTING (WAP) AT 2 OR 3 OZ/A (0.106 OR 0.159 LB AI/A); CROP INJURY 6 WAP 11% OR LESS REGARDLESS OF RATE OR TIMING, EXCEPT WHEN C.O.C. INCLUDED WITH HIGH RATE 4WAP (18%). YIELD VARIABLE DUE TO WEATHER-RELATED STAND ISSUES.
BATTS	Rose, Jack	P15-TX-DMP	RECD	NONE	ZIDUA @ 2 OZ PROD/A POST APPLIED AT 2, 3 OR 4 WEEKS AFTER PLANTING; NO SIGNIFICANT INJURY OR YIELD LOSS WITH ALL APPLICATION TIMINGS.
BATTS	Grichar, W. James	P14-TX-DMP	RECD	NONE	ZIDUA @ 2 OZ PROD/A POST APPLIED AT 2, 3 OR 4 WEEKS AFTER PLANTING; SLIGHT INJURY WITH COMPLETE RECOVERY, NO SIGNIFICANT YIELD LOSS WITH ALL APPLICATION TIMINGS.
BATTS	Grichar, W. James	P15-TX-DMP	RECD	NONE	ZIDUA @ 2 OZ PROD/A POST APPLIED AT 4 WEEKS AFTER PLANTING; VERY SLIGHT INJURY WITH COMPLETE RECOVERY BY 4 WEEKS POSTTREATMENT.
BATTS	Grichar, W. James	P15-TX-DMP	RECD	NONE	ZIDUA @ 2 OZ PROD/A POST APPLIED AT 2 WEEKS AFTER PLANTING; VERY SLIGHT INJURY WITH COMPLETE RECOVERY BY 47 DAYS POSTTREATMENT.
BATTS	Flessner, Michael L.	P15-VA-DMP	RECD	NONE	ZIDUA AT 1.5 OZ PROD/A + NIS POST AT 2 WEEKS OR AT 1.5 OZ PROD/A POST AT 3 WEEKS AFTER PLANTING (WAP); NO SIGNIFICANT INJURY WITH BOTH APPLICATION TIMINGS.



Weed Science Date: 9/2/2025 **BATTS** Baughman, Todd A (OK) P14-OK-DMP **RECD** NONE ZIDUA AT 2 OZ PROD/A POST APPLIED AT 4, 5 AND 6 WEEKS AFTER PLANTING (WAP); NO SIGNIFICANT INJURY WITH ALL TREATMENTS; SIGNIFICANT YIELD LOSS WITH 6 WAP, NONE WITH OTHER TREATMENTS. **BATTS** Dotray, Peter P15-TX-DMP **RECD** NONE ZIDUA AT 2 OZ PROD/A POST APPLIED AT 2, 3 AND 4 WEEKS AFTER PLANTING; MODERATE INITIAL INJURY WITH GOOD RECOVERY, AND NO SIGNIFICANT YIELD LOSS WITH ALL APPLICATION TIMINGS. **RECD** ZIDUA AT 1.5 AND 3 OZ PROD/A + COC POST APPLIED AT 2, 3 AND 4 WEEKS **BATTS** Barber, Tom P14-AR-DMP NONE AFTER PLANTING (WAP); MODERATE INJURY WITH COMPLETE RECOVERY WHEN APPLIED 2 WAP. NO SIGNIFICANT INJURY WITH OTHER TREATMENTS. Ducar, Joyce Tredaway ZIDUA AT 2 OZ PROD/A POST APPLIED AT 27 OR 37 DAYS AFTER PLANTING; **BATTS** P15-AL-DMP RECD NONE NO SIGNIFICANT INJURY OR YIELD REDUCTION WITH BOTH APPLICATION TIMINGS. **RECD** NONE ZIDUA @ 2 OZ PROD/A POST APPLIED AT 2 WEEKS OR 3 WEEKS AFTER **BATTS** Price, Andrew P15-AL-DMP PLANTING: SLIGHT INJURY WITH BOTH APPLICATION TIMINGS. **BATTS** Baughman, Todd A (OK) P15-OK-DMP RECD NONE ZIDUA AT 1.5 OZ PROD/A POST APPLIED AT 2 AND 3 WEEKS AFTER PLANTING (WAP): EXCELLENT CROP SAFETY. RECD **BATTS** Barber, Tom P13-AR-DMP NONE ZIDUA AT 0.106 LB AI /A + COC POST; EXCELLENT CROP SAFETY. **BATTS** Dotray, Peter P15-TX-DMP RECD NONE ZIDUA AT 2 OZ PROD/A POST APPLIED AT 14, 21 AND 28 DAYS AFTER PLANTING (DAP); MODERATE INITIAL INJURY WITH GOOD RECOVERY; NO YIELD LOSS. **BATTS** Dotray, Peter P15-TX-DMP **RECD** NONE ZIDUA AT 2 OZ PROD/A POST APPLIED AT 14, 21 AND 28 DAYS AFTER PLANTING (DAP); MODERATE INITIAL INJURY WITH GOOD RECOVERY; NO YIELD LOSS. **BATTS** Ducar, Joyce Tredaway P15-AL-DMP **RECD** NONE ZIDUA AT 2 OZ PROD/A POST APPLIED AT 30 DAYS AFTER PLANTING; NO INJURY: NO SIGNIFICANT DIFFERENCES IN YIELD BETWEEN TREATMENTS. RECD BATTS Flessner, Michael L. P15-VA-DMP NONE ZIDUA AT 1.5 OZ PROD/A + NIS POST APPLIED AT 2 AND 3 WEEKS AFTER PLANTING; SLIGHT INJURY, SIMILAR TO UNTREATED **RECD** BATTS Rose, Jack P15-TX-DMP NONE ZIDUA AT 2 OZ PROD/A POST APPLIED AT 14, 21 AND 28 DAYS AFTER PLANTING (DAP); EXCELLENT CROP SAFETY; NO SIGNIFICANT YIELD LOSS. P15-AL-DMP **RECD** NONE ZIDUA AT 2 OZ PROD/A POST APPLIED AT 2 AND 3 WEEKS AFTER PLANTING **BATTS** Price, Andrew (WAP); GOOD CROP SAFETY.



Weed Science Date: 9/2/2025

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BATTS	Rose, Jack	P15-TX-DMP	RECD	NONE	ZIDUA AT 2 OZ PROD/A POST APPLIED AT 14 DAYS AFTER PLANTING; GOOD TO EXCELLENT CROP SAFETY ON ALL 8 VARIETIES TESTED.
BATTS	Rose, Jack	P15-TX-DMP	RECD	NONE	ZIDUA AT 2 OZ PROD/A POST APPLIED AT 28 DAYS AFTER PLANTING; EXCELLENT CROP SAFETY ON ALL 8 VARIETIES TESTED.
BATTS	Ferguson, Connor	P22-OKP01	NA NA	NONE	TRIAL NOT COMPLETED DUE TO ENVIRONMENTAL CONDITIONS:11/22
BATTS	Ferguson, Connor	P22-TXP01	NA	NONE	TRIAL NOT COMPLETED DUE TO ENVIRONMENTAL CONDITIONS:11/22
BATTS	Grichar, W. James	P22-TXP02	RECD	NONE	ZIDUA SC APPLIED BROADCAST AT 6.5 OR 13.0 FL/A (0.212 OR 0.424 LB AI/A) OVER SESAME AT 3, 4 OR 5 LEAF-PAIR (LF-PR). ZIDUA AT 3.25 FL OZ/A (0.106 LB AI/A) WAS ALSO APPLIED OVER 4 LF-PR SESAME. SIGNIFICANT LEAF BURN FROM 13 FL OZ/A 7 DAYS AFTER THE 3 AND 4 LF-PR SPRAYS AND FROM 6.5 FL OZ/A AFTER THE 4 LF-PR SPRAY. APPLIED AT 3 LF-PR, THE HIGH RATE CREATED SIGNIFICANT STAND REDUCTIONS AND SIGNIFICANT, PERSISTENT CROP STUNTING. ZIDUA DID NOT NEGATIVELY IMPACT YIELD, REGARDLESS OF APPLICATION RATE OR TIMING.
BATTS	De La Fuente, Gerald	P23-OKP02		NONE	Trial cancelled due to weather
BATTS	De La Fuente, Gerald	P23-TXP07	RECD	NONE	ZIDUA SC APPLIED BROADCAST AT 6.5 OR 13.0 FL/A (0.212 OR 0.424 LB AI/A) OVER 3, 4 OR 5 LEAF-PAIR (LF-PR) 'S2431' SESAME GROWING IN A KNIPPA CLAY. ZIDUA AT 3.25 FL OZ/A (0.106 LB AI/A) WAS ALSO APPLIED OVER 4 LF-PR SESAME. ZIDUA CAUSED NO CROP INJURY AT ANY EVALUATION, REGARDLESS OF RATE OR TIMING. NO YIELD DIFFRENCES BETWEEN ZIDUA TREATMENTS AND WEED-FREE CHECK.
BATTS	De La Fuente, Gerald	P24-TXP02	RECD	NONE	ZIDUA SC APPLIED BROADCAST AT 6.5 OR 13.0 FL/A (0.212 OR 0.424 LB AI/A) OVER 3, 4 OR 5 LEAF-PAIR (LF-PR) 'S2431' SESAME. ZIDUA AT 3.25 FL OZ/A (0.106 LB AI/A) WAS ALSO APPLIED OVER 4 LF-PR SESAME. ZIDUA CAUSED LITTLE TO NO CROP INJURY AT ANY EVALUATION, REGARDLESS OF RATE OR TIMING. NO YIELD DIFFRENCES BETWEEN ZIDUA TREATMENTS AND WEED-FREE CHECK.
BATTS	Performance Summary	P25-HQ-SUM	RECD	NONE	SUMMARY OF IR-4 PRODUCT PERFORMANCE PREPARED BY RBB. INCLUDES DATA FROM FT ID#s 15-MS-DMP, 14-OK-DMP, 17-CAP33, 17-TXP01, 17-ARP01, 15-TX-DMP, 14-TX-DMP, 15-TX-DMP, 15-TX-DMP, 15-TX-DMP, 15-TX-DMP, 15-AL-DMP, 15-AL-DMP, 15-OK-DMP, 13-AR-DMP, 15-TX-DMP, 15-TX-DMP, 15-TX-DMP, 15-TX-DMP, 15-TX-DMP, 15-TX-DMP, 15-TX-DMP, 15-TX-DMP, 15-TX-DMP, 22-OKP01, 22-TXP01, 22-TXP02, 23-OKP02, 23-TXP07, & 24-TXP02. FORWARDED TO KUMIAI 02/25



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

14037 ICAFOLIN-METHYL (BAYER)

\* SUNFLOWER (20B=SUNFLOWER SUBGROUP)

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

Reasons for need:

Annual broadleaf and grass weeds. Kochia has developed resistance to key herbicides used for preplant/preemergence burndown applications, including Express (Group 2), Roundup (Group 9), and Sharpen/Aim Group 14. The only effective burndown herbicide remaining is paraquat, which some growers prefer not to use. We need another burndown product that effectively controls kochia and is safe to the crop:06/25;

REQ STATES ND

**NorthEast Region** 

**NorthCentral Region** 

Southern Region

**Western Region** 

Reduced Risk

### **PCR Use Pattern:**

Make one Spring broadcast application at 100 to 150 g ai/ha (0.089 to 0.134 lb ai/a) to emerged weeds as a preplant or preemergence spray in the spring. Application must be made prior to crop emergence. Bayer supports a rate of 25-150 g ai/ha:08/25/sb;

# **HQ Comments:**

Key Export Markets: Canada, Mexico, Spain, South Korea. EPA PENDING:08/25; Bayer supports as Researchable, Res & E/CS Data Needed:08/25/sb;

### **Nomination Justification:**

(2025 MI) See Prev;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Data from field trials indicate good weed efficacy and crop safety. A single application should be sufficient. We intend to always tank mix the product with another mode of action for product stewardship:06/25;



Weed Science Date: 9/2/2025

PR#

**CHEMICAL (MFG)** 

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13920 \*

TOPRAMEZONE (BASF)

\* SUNFLOWER (20B=SUNFLOWER SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

Broadleaf weeds, especially kochia. Kochia has developed resistance to key herbicides used for preplant/preemergence burndown applications, including Express (Group 2), Roundup (Group 9), and Sharpen/Aim Group 14. The only effective burndown herbicide remaining is paraquat, which some growers prefer not to use. We need another burndown product that effectively controls kochia, but yet has little to no soil residual that could damage the crop:11/24;

REQ STATES ND

**NorthEast Region** 

**NorthCentral Region** 

Southern Region

Α

Western Region

**Reduced Risk** 

#### PCR Use Pattern:

Make one broadcast application of Armezon at 0.25 to 0.5 fl oz/a to emerged weeds just prior to seeding sunflower or just after seeding and prior to emergence;

# **HQ Comments:**

XH692 dmp rpts forwarded to BASF:08/24. On 10/17/24, a new PCR was submitted from ND for Topramezone / Sunflower, but was withdrawn the same day. Therefore, this PR# was not converted, nor a new # established:10/24/sb; original dmp XH692 was converted to PR# 13920 when yet another new pcr was submitted:11/24/sb; Key Exports noted in Canada, Mexico, Spain South Korea; BASF approves as Potential, ECS before residue. Only crop safety data is needed 05/25/ds;

#### **Nomination Justification:**

(2025 MI) See Prev;

#### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Data from field trials indicate good efficacy against small kochia. We have not observed crop injury from soil residual. A single application should be sufficient. We intend to always tank mix the product with another mode of action for product stewardship:11/24;

Jenks, Dr. Brian	P23-ND-DMP	RECD	Armezon applied at 0.25 or 0.5 fl oz/a (0.0055 or 0.011 lb ai/a) with bromoxynil broadcast preemergence immediately after planting sunflowers caused no crop injury through 37 days after planting. Complete crop safety was also seen when sulfentrazone was added to the high rate of topramezone + bromoxynil applied preemergence.
Jenks, Dr. Brian	P24-ND-DMP	RECD	Armezon applied at 0.25 or 0.5 fl oz/a (0.0055 or 0.011 lb ai/a) with bromoxynil broadcast preemergence immediately after planting sunflowers caused no crop injury through 37 days after planting.



Weed Science Date: 9/2/2025

Α

**Western Region** 

PR# CHEMICAL (MFG) COMMODITY (CROP GROUP) PROJECT STATUS

13892 EPYRIFENACIL (VALENT) SAFFLOWER (20B=SUNFLOWER SUBGROUP) RESEARCHABLE, ONLY RESIDUE DATA NEEDED

Reasons for need: Winter and spring annual weeds. This product is needed as an pre-plant burn down application to control winter and

NorthCentral Region

REQ STATES CA

spring annual weeds in safflower production:08/24;

Southern Region

**Reduced Risk** 

#### **PCR Use Pattern:**

NorthEast Region

Make two preplant burndown applications of Rapidical at 5 fl oz/a plus adjuvant, approximately 30 days apart with the second application 14 day before seeding safflower. Valent supports a max of 2 applications with a 14 day retreatment interval with applications made prior to planting safflower. Maximum annual use of 10 fl oz/A. Target use rate of 5 fl oz/A with a maximum per application use rate of 10 fl oz/A. Labeling will require tank mixture with another burndown herbicide for resistance management/product stewardship:08/24/sb

#### **HQ Comments:**

Key Export Market: SE Asia:08/24; Valent supports as Potential: E/CS Data Before Approval for Residue, with the use pattern noted:08/24/sb; E/CS ongoing 12/24/ds; "interim" e/cs data was rec'd and forwarded to Valent who agreed to change their support from Potential to Researchable, Only Residue data needed. E/CS full rpts to be posted once received:07/25/sb;

#### **Nomination Justification:**

(2024 CA) Same as above; (2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; When paired with crop rotation and various cultural practices including tillage, cultivation and hand weeding this herbicide has an excellent ipm fit; VGF-WSR:08/24;

BATTS	Clark, Nicholas	P25-CAP01	NONE
BATTS	Clark, Nicholas	P25-CAP02	NONE
	Clark, Nicholas	P25-CAP03	NONE



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14036 ICAFOLIN-METHYL (BAYER)

SAFFLOWER (20B=SUNFLOWER SUBGROUP)

UNDER EVALUATION

Reasons for need:

Annual broadleaf and grass weeds. Kochia has developed resistance to key herbicides used for preplant/preemergence burndown applications, including Express (Group 2), Roundup (Group 9), and Sharpen/Aim Group 14. The only effective burndown herbicide remaining is paraquat, which some growers prefer not to use. We need another burndown product that effectively controls kochia and is safe to the crop:06/25;

REQ STATES ND

**NorthEast Region** 

**NorthCentral Region** 

Southern Region

Α

**Western Region** 

**Reduced Risk** 

### **PCR Use Pattern:**

Make one Spring broadcast application at 100 to 150 g ai/ha (0.089 to 0.134 lb ai/a) to emerged weeds as a preplant or preemergence spray in the spring. Application must be made prior to crop emergence.

# **HQ Comments:**

Key Export Market: Canada (birdseed); EPA PENDING:08/25;

### **Nomination Justification:**

(2025 MI) See Prev;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Data from field trials indicate good weed efficacy and crop safety. A single application should be sufficient. We intend to always tank mix the product with another mode of action for product stewardship:06/25;



Weed Science Date: 9/2/2025

PR#

**CHEMICAL (MFG)** 

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13917 \*

TOPRAMEZONE (BASF)

SAFFLOWER (20B=SUNFLOWER SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

Broadleaf weeds, especially kochia. Kochia has developed resistance to key herbicides used for preplant/preemergence burndown applications, including Express (Group 2), Roundup (Group 9), and Sharpen/Aim Group 14. The only effective burndown herbicide remaining is paraquat, which some growers prefer not to use. We need another burndown product that effectively controls kochia, but yet has little to no residual that could damage the crop:10/24/;

REQ STATES

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ND

**NorthEast Region** 

**NorthCentral Region** 

Southern Region

**Western Region** 

**Reduced Risk** 

#### PCR Use Pattern:

Make one broadcast application of Armezon at 0.25 to 0.5 fl oz/a to emerged weeds just prior to seeding safflower or just after seeding and prior to emergence.

Α

# **HQ Comments:**

Export commodity toCanada (birdseed); Supporting data for sunflower (XH692) indicates good crop safety:10/24/sb; BASF approves as Potential, ECS before residue. Only crop safety data is needed 05/25/ds;

### **Nomination Justification:**

(2025 MI) See Prev;

# **IPM Comments from PCR:**

Per requester: Very Good Fit; Data from field trials indicate good efficacy against small kochia. We have observed very little residual impact in soil. A single application should be sufficient. We intend to always tank mix the product with another mode of action for product stewardship:10/24;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13499 GLUFOSINATE (BASF,UPL NA)

\* ASPARAGUS (22A=STALK AND STEM VEGETABLE SUBGROUP)

UNDER EVALUATION

Reasons for need:

BROADLEAF AND GRASSES (MAINLY TO CONTROL GLYPHOSATE AND ALS RESISTANT PIGWEED SPP.; REDROOT PIGWEED AND POWELL AMARANTH ONE OF THE MAJOR WEEDS IN ASPARAGUS AND HARD TO CONTROL ESPECIALLY WHEN RESISTANT (ALS AND GLYPHOSATE) BIOTYPES ARE PRESET. GLUFOSINATE WILL HELP TO MANAGE VARIOUS BROADLEAF AND GRASSES WEEDS INCLUDING PIGWEED SPP. PROVIDE IMPROVED WEED CONTROL COMPARED TO CARFENTRAZON:

REQ STATES MI NJ IN NY

NorthEast Region

A NorthCentral Region

**Southern Region** 

Western Region

Reduced Risk

#### **PCR Use Pattern:**

DOSAGE RATE: 0.53 LB AI/A, FOLIAR APPLICATION, ONE APPLICATION ONLY AS POST HARVEST, APPLY IMMEDIATELY AFTER LAST HARVEST OF ASPARAGUS

# **HQ Comments:**

BASF supported as Potential, Need E/CS Data before Residue 08/22: 08/25/sb; THIS POST-HARVEST APPLICATION IS REGISTERED FOR USE IN CANADA. HOWEVER, IT WAS GRANDFATHERED IN AND BASF IS LOOKING FOR DATA ON THIS USE; APPLICATION MUST BE MADE BETWEEN THE TIME BETWEEN THE FEW HARVESTABLE EMERGED SPEARS AND BEFORE THE SPEARS TO BE FERNS EMERGE; EPA HOLD CAUTION:08/23; BASF is currently reviewing E/CS data so the status was changed from E/CS ongoing to Under Eval to allow the project to go on nominations while they review:08/25/sb;

#### **Nomination Justification:**

(2022 MI) See past comments;(2022 MD) see database comments;(2025 NY) The inclusion of glufosinate in asparagus production systems is essential for managing broadleaf and grassy weed species, particularly where herbicide-resistant biotypes are present. Among the most problematic weeds in asparagus fields are pigweed species, including redroot pigweed (Amaranthus retroflexus) and Powell amaranth (Amaranthus powellii). Comparatively, glufosinate provides improved postemergence control of broadleaves and grasses over alternatives.;(2025 NJ) See previous comments. Glufosinate would provide postharvest control of herbicide resistant Palmer amaranth in NJ and improved control of a large spectrum of annual grasses and broadleaf species compared to other available options.;

#### **IPM Comments from PCR:**

PER REQUESTER: GOOD FIT; HELP TO MANAGE RESISTANT WEED SPP. HAS LITTLE SOIL RESIDUAL:08/22

### **IPM Comments from Nomination Process:**

; Good Fit: Its use supports resistance management strategies by introducing a different herbicide mode of action (Group 10) into the weed control program. It enhances weed management outcomes, particularly where other herbicides have failed due to resistance, and complements integrated weed management strategies aimed at sustaining long-term asparagus productivity.: Lynn Sosnoskie; Good Fit: This approach perfectly aligns with integrated weed management strategies by reducing reliance on a limited number of herbicide modes of action:: Thierry Besancon



Weed Science

Proje	(CI)			Weed Colonies	24.0. 4/2 2-2-2	
BATTS	Besancon, Thierry	P23-NJP05	RECD	NONE	Rely 280 (+ AMS) applied broadcast postemergence at 29, 43 or 87 fl oz/a (0.53, 0.79 or 1.59, lb ai/a) immediately after last harvest to evaluated weed control and asparagus fern response. Roundup PowerMax 3 + NIS (glyphosate) at 32 fl oz/a was also included. Little to no fern foliar injury seen from any of the post-harvest herbicide treatments. Fern stunting from glufosinate 60 DAA ranged from 3.3 to 4.5%, while glyphosate caused 3.5% stunting. Asparagus vigor the following spring was not reduced by glyphosate or any of the glufosinate treatments. Vigor was actually numerically and/or statistically higher in the herbicide treatments, possibly due to improved perennial weed control the previous year.	
BATTS	Meyers, Stephen L (NCR)	P23-INP01	RECD	NONE	Rely 280 (+ AMS) applied broadcast postemergence at 29, 43 or 87 fl oz/a (0.53, 0.79 or 1.59, lb ai/a) immediately after last harvest to evaluated weed control and asparagus fern response. Roundup PowerMax (glyphosate) at 22 fl oz/a was also included. Fern injury from glufosinate 7 days after application (DAA) ranged from zero to 23% with an apparent rate response. Glyphosate injured ferns 22% at this time. All injury decreased rapidly in all treatments after the initial evaluation. Asparagus vigor the following spring was not impacted by glufosinate, regardless of application rate. Puncturevine was not controlled by any treatment. Control of other broadleaf weeds was clearly higher from Rely at 43 and 87 fl oz/a than 29 fl oz/a.	
BATTS	Walsh, Dr. Doug	P23-WAP03	RECD	NONE	Rely 280 (+ AMS) applied broadcast postemergence at 29, 43, 87 or 128 fl oz/a (0.53, 0.79, 1.59, or 2.34 lb ai/a) immediately after last harvest to evaluated weed control and asparagus fern response. Other treatments applied at this timing included Roundup PowerMax (glyphosate) at 32 fl oz/a and Aim (carfentrazone) at 2 fl oz/a. Fern injury from glufosinate 6 days after application (DAA) ranged from 2.5 to 10.5% with an apparent rate response. No injury was seen from glyphosate or carfentrazone Injury from all rates had disappeared by 36 DAA. Good to excellent redroot pigweed control from all glufosinate rates 6 DAA and from most rates 17 DAA. Asparagus vigor the following spring was not impacted by glufosinate, regardless of application rate.	
BATTS	Heider, Daniel J.	P23-WIP02	RECD	NONE	Rely 280 (+ AMS) applied broadcast postemergence at 29, 43, 87 or 128 fl oz/a (0.53, 0.79, 1.59, or 2.34 lb ai/a) immediately after last harvest to evaluated weed control and asparagus fern response. Other treatments applied at this timing included Roundup WeatherMax (glyphosate) at 29 fl oz/a and Aim (carfentrazone) at 1.92 fl oz/a. None of the post-harvest treatments caused any injury through the remainder of 2023 or through mid-May 2024 vigor evaluations. No weed control data collected due to control provided by maintenance herbicides and post-harvest treatments.	

Date: 9/2/2025



, .	11-9-14							
BATTS	Hanson, Brad	P24-CAP04	RECD	NONE	Rely 280 (+ AMS) applied broadcast postemergence at 29, 43, 87 or 128 fl oz/a (0.53, 0.79, 1.59, or 2.34 lb ai/a) immediately after last harvest to evaluate asparagus fern response. Other treatments applied at this timing included Roundup PowerMax (glyphosate) at 1.14 lb ae/a and Quinstar 4L (quinclorac) at 0.37 lb ai/a. Roundup PowerMax included AMS and Quinsatar included COC. None of the post-harvest treatments caused any crop injury through the 60 days after application through late-Feb 2025 vigor evaluations.			
BATTS	Performance Summary	P25-HQ-SUM	RECD	NONE	SUMMARY OF IR-4 PRODUCT PERFORMANCE PREPARED BY RBB. INCLUDES DATA FROM FT ID#s 23-NJP05, 23-INP01, 23-WAP03, 23-WIP02, & 24-CAP04. FORWARDED TO BASF. 08/25			

Weed Science

Date: 9/2/2025



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

13984 ICAFOLIN-METHYL (BAYER)

\* OLIVE (23A=TROPICAL AND SUBTROPICAL, SMALL FRUIT, EDIBLE PEEL SUBGROUP)

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

Reasons for need:

Italian ryegrass and other grassy weeds. Herbicide resistance management requires more robust rotation options for olives, a historically under-served specialty crop in CA:06/25;

**REQ STATES** 

CA

**Reduced Risk** 

**NorthEast Region** 

NorthCentral Region

**Southern Region** 

Western Region

Α

#### **PCR Use Pattern:**

Make three applications of icafolin-methyl at 0.044 to 0.134 lb ai/a, approximately 30 days apart, as a broadcast spray to the orchard floor or as a post-directed spray to orchard floor and across the lower olive trunks.

## **HQ Comments:**

Export Markets: Canada, Mexico, European Union. EPA PENDING:08/25; Bayer supports as Researchable, Res & E/CS Data Needed:08/25/sb;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Useful in controlling populations with established pesticide resistance:06/25;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13737 RIMSULFURON (CORTEVA)

\* FIG (23B=TROPICAL AND SUBTROPICAL, MEDIUM TO LARGE FRUIT, EDIBLE PEEL SUBGROUP)

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

Reasons for need: Annual grass and weeds, Industry currently lacks effective herbicides for weed control:08/23

REQ STATES

NorthEast Region

NorthCentral Region

Western Region

Α

**Reduced Risk** 

CA

### **PCR Use Pattern:**

Make one broadcast application of Matrix SG at 4 oz/a or two banded applications, at least 30 days apart. Do not apply within 14 days of harvest. Do not exceed 4.0 oz/a per year.

**Southern Region** 

### **HQ Comments:**

Mfg supports as Researchable, Residue & E/CS Data Needed:08/23; EPA CAUTION:08/24, 08/25;

### **Nomination Justification:**

(2023 CA) Same;(2024 CA) same as above;(2025 CA) same;

# **IPM Comments from PCR:**

Per Requester: Very Good Fit; Data from similar commodities demonstrate good efficacy for annual grass and weed control:08/23; FAIR FIT: SAME: WSR; VGF-WSR:08/24;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14004 FLORPYRAUXIFEN-BENZYL (CORTEVA)

\* DATE (23C=TROPICAL AND SUBTROPICAL, PALM FRUIT, EDIBLE PEEL SUBGROUP)

**UNDER EVALUATION** 

Reasons for need:

Post emergent weed control. Glyphosate is the primary herbicide used by the date palm growers. This product is under increasing political scrutiny in California. Additionally, glyphosate resistant weeds are an issue. florpyrauxifen controls many of the glyphosate resistant weeds and could potentially replace reliance on glyphosate:06/25;

REQ STATES CA

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

**Reduced Risk** 

# **PCR Use Pattern:**

Make three post-directed applications at 0.07 lb ai/a, approximately 30 days apart, beginning in spring. Based on published production literature and application timings in research reports, IR-4 suggests a 60 day PHI.

### **HQ Comments:**

E/CS data was generated under IS00393. This active ingredient is exempt from tolerance;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Good Fit; Glyphosate resistant weeds are an issue in date orchards. Registration of florpyrauxifen controls many of the glyphosate resistant weeds and could potentially replace reliance on glyphosate:06/25;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14005 GLUFOSINATE (BASF, UPL NA)

\* DATE (23C=TROPICAL AND SUBTROPICAL, PALM FRUIT, EDIBLE PEEL SUBGROUP)

**UNDER EVALUATION** 

Reasons for need:

Post emergent weed control. Glyphosate is the primary herbicide used by the date palm growers. This product is under increasing political scrutiny in California. Alternatives are needed especially with the increasing level of glyphosate resistance in weed species.

**REQ STATES** CA

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

**Reduced Risk** 

# **PCR Use Pattern:**

Make three post-directed applications of Rely at 164 fl oz/a, approximately 30 days apart, beginning in spring. Applications will be made along both sides of the crop and will overlap the lower fronds. Based on published production literature and application timings in research reports, IR-4 suggests a 60 day PHI.

### **HQ Comments:**

E/CS data was generated under IS00393. EPA (HOLD) CAUTION:08/25;

### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Good Fit; Glyphosate resistant weeds are an issue in date orchards. Glufosinate effectively controlled glyphosate resistant weeds and could potentially replace reliance on glyphosate:06/25;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

11293 FLUMIOXAZIN (VALENT)

MANGO (24B=TROPICAL AND SUBTROPICAL, MEDIUM TO LARGE FRUIT, SMOOTH, INEDIBLE PEEL SUBGROUP)

Α

UNDER EVALUATION

Reasons for need: PARTHENIUM HYSTEROPHORUS; NEED RESIDUAL CONTROL OF INVASIVE WEEDS

**REQ STATES** 

FL PR

NorthEast Region

**NorthCentral Region** 

**Southern Region** 

Western Region

Α

**Reduced Risk** 

#### PCR Use Pattern:

2-6 OZ AI/A; 3-4 FOLIAR OR BANDED APPLIC DIRECTED TO WEEDS (MFG RECOMMENDS NO MORE THAN 24 OZ/A/YR); MIX WITH SYSTEMIC OR BURNDOWN HERBICIDE TO CONTROL MATURE PARTHENIUM; 30-90 DAY RE-TREATMENT INTERVAL (MFG RECOMMENDS 60 DAYS); 0-10 DAY PHI

#### **HQ Comments:**

EPA CAUTION:08/14; MFG ADDRESSING ISSUES:09/14; EPA CAUTION:08/16; EPA CAUTION: 08/17; EPA GREEN:09/18; CAN BE COVERED BY ONGOING AVOCADO (10253) AND BANANA (11289) RESIDUE STUDIES IN 2018, IF THE USE PATTERN IN THIS MANGO REQUEST IS TWEAKED TO MATCH THOSE PROJECTS (2 APPLIC, 0.375 LB AI/A, 60-DAY INTERVAL, 3-DAY PHI), WHICH CAN BE DONE AT LABELING TIME:09/18; EPA GREEN:09/19; status changed from "covered by another project" to "petition submitted to EPA" 08/24/ds; not included in epa petition and status updated to Under Eval until mfg/Valent provides update:09/24/sb;

#### Efficacy/Crop Safety (E/CS) Data Required:

E/CS DATA TO BE COVERED BY AVOCADO (11288) OR PAPAYA (11291) RESEARCH

#### **Nomination Justification:**

(2014 FL) May be combined with other herbicides. This is a horrible weed spreading throughout Florida and we desperately need products for crop use, good IPM Residue trial. Need to control parthenium in groves. High [priority]. Need for crop with little herbicide options.;(2015 FL) Earlier comments still apply.;(2018 FL) PARTHENIUM HYSTEROPHORUS; NEED RESIDUAL CONTROL OF INVASIVE WEEDS

;(2019 FL) PARTHENIUM HYSTEROPHORUS; NEED RESIDUAL CONTROL OF SIGNIFICANT INVASIVE WEED;(2025 FL) See previous comments.;(2025 CA) MUF Interest;

#### **IPM Comments from PCR:**

FROM SOR 2014 NOMINATION: GOOD IPM FIT; COMPATIBLE WITH CULTURAL PRACTICES AS PART OF AN IPM APPROACH TO WEED MANAGEMENT

#### **IPM Comments from Nomination Process:**

; Good Fit: See previous comments.: Kristen Searer-Jones

Crane, Dr. Jonathan H. P12-FL-DMP RECD NONE 6 OZ AI/A ALONE OR 2, 3 AND 4 OR 6 OZ AI/A + GLUFOSINATE-AMMONIUM BROADCAST DIRECTED TO WEEDS ON KROME VERY GRAVELLY SANDY LOAM SOIL; GOOD WEED CONTROL WITH THE COMBINATION TREATMENT IN 2 AVOCADO TRIALS



Weed Science Date: 9/2/2025

Reddy, Krishna N.

P07-MS-DMP

RECD

NONE

TWO FIELD TRIALS IN 2005 AND 2006. CHATEAU AT 1.25 OZ AI/A APPLIED POST AT EITHER ROSETTE OR BOLTED STAGE OF PARTHENIUM IN A NON-CROP AREA; GOOD CONTROL APPLIED AT ROSETTE STAGE; INFERIOR TO GLYPHOSATE. POOR CONTROL APPLIED AT BOLTED STAGE.



Weed Science Date: 9/2/2025

PR#

**CHEMICAL (MFG)** 

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13534 \*

INDAZIFLAM (BAYER)

MANGO (24B=TROPICAL AND SUBTROPICAL, MEDIUM TO LARGE FRUIT, SMOOTH, INEDIBLE PEEL SUBGROUP)

Α

NEED E/CS DATA ONLY

Reasons for need: WEEDS, LACK OF EFFECTIVE HERBICIDES TO MANAGE WEEDS ESPECIALLY PARTHENIUM HYSTEROPHORUS

**REQ STATES** 

PR HI

**NorthEast Region** 

NorthCentral Region

Southern Region

Western Region

Α

**Reduced Risk** 

### **PCR Use Pattern:**

6.5 OZ/A; 1 BANDED APPLICATION PER GROWING SEASON WITH A PHI OF 7 DAYS;

### **HQ Comments:**

MFG REQUIRES APPLICATIONS UP TO 2X FOR A MINIMUM OF 3 YEARS: 12/22; WHILE THE ORIGINAL REQUEST WAS FOR 7 DAYS, MFG HAS NOT AGREED TO SUPPORT IT FOR THAT TIME PERIOD SINCE A TOLERANCE IS ALREADY ESTABLISHED FOR 14 DAY PHI ON MANGO; RESIDUE STUDY NOT REQUIRED; NEED E/CS DATA ONLY; THIS HAS BEEN COMMUNICATED WITH THE REQUESTER:01/23

#### **Nomination Justification:**

(2023 CA) Same: (2023 FL) See requester's comments.: (2024 FL) See previous comments.: (2025 FL) See requestor's comments.: (2025 CA) same:

### **IPM Comments from PCR:**

PER REQUESTOR, VERYGOODFIT; IT CAN BE COMBINED WITH MECHANICAL CONTROL ALONG FEW AVAILABLE HERBICIDES LIKE GLYPHOSATE TO KEEP WEEDS UNDER CONTROL. IT MAY PROVIDE PREEMERGENCE AND RESIDUAL WEED CONTROL SPECIALLY AT PLANTING NEW FIELDS; VERY GOOD FIT: SAME: WSR; VERY GOOD FIT: SEE REQUESTER'S COMMENTS.: SOR

#### **IPM Comments from Nomination Process:**

; Very Good Fit: See requestor's comments.: Kristen Searer-Jones



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

11933 SAFLUFENACIL (BASF)

MANGO (24B=TROPICAL AND SUBTROPICAL, MEDIUM TO LARGE FRUIT, SMOOTH, INEDIBLE PEEL SUBGROUP)

RESEARCHABLE, RESIDUE & E/CS DATA NEEDED

Reasons for need: WEEDS (INCLUDING PARTHENIUM WHICH IS NOT CONTROLLED BY CURRENT PRODUCTS)

**REQ STATES** 

FL PR

NorthEast Region

NorthCentral Region

**Southern Region** 

Western Region

Α

**Reduced Risk** 

Yes

#### PCR Use Pattern:

USE THE TREEVIX PRODUCT; MAKE 3-4 FOLIAR TO WEEDS APPLIC OF 1 OZ/A, 21-DAY INTERVAL; NO PHI SPECIFIED; MAKE 2 APPLIC DURING NO CROP PERIOD AND 1-2 DURING EARLY CROP PERIOD; USE AN ADJUVANT

#### **HQ Comments:**

TOLERANCE IS ESTABLISHED ON POMEGRANATE, SO IF RESIDUE DATA IS GENERATED ON AVOCADO (USING A SIMILAR USE PATTERN) COULD SECURE A CROP SUBGROUP 24B TOLERANCE, WHICH WOULD COVER MANGO AND MANY OTHER TROPICAL FRUITS:05/16; MFG NEEDS TO SEE CROP SAFETY DATA BEFORE APPROVING RESIDUE WORK; NO EFFICACY DATA NEEDED, AS THE PRODUCT CONTROLS PARTHENIUM:07/16; PER PR ME-TOO REQUEST, MANGO IS AN EXPORT COMMODITY IN PR:06/20; BASF now supports status update form Potential: E/CS data before approval for Residue to Researchable, Requires both Residue & E/CS:04/25/sb;

#### Efficacy/Crop Safety (E/CS) Data Required:

MANGO CROP SAFETY TRIALS ARE NEEDED ON LOCAL VARIETIES; MFG WILL HELP DESIGN CROP SAFETY EVALUATION PROTOCOLS:07/16; ONLY CROP SAFETY TRIALS NEEDED; BEFORE PLANNING FIELD TRIALS, MFG MUST CONDUCT THEIR STANDARD GH POT SCREENING STUDY ON YOUNG MANGO TREES, WHICH HAVE BEEN REQUESTED FROM FL; IF GH STUDY RESULTS ARE ACCEPTABLE, NEED FIELD TESTS ON PROMINENT LOCAL VARIETIES, 1-2 TRIALS OVER 2 YEARS ON THE SAME PLOTS:09/16; BASF requires CS (only) data from at least 3 trials in FL + PR:04/25/sb;

#### **Nomination Justification:**

(2016 FL) A for Efficacy/Crop Safety;(2020 FL) Urgent need for parthenium control options, no longer being adequately controlled by glyphosate and paraquat.;(2021 FL) See previous.;(2023 FL) See previous comments.;(2024 FL) See previous comments.;(2025 CA) MUF Interest;

### **IPM Comments from PCR:**

PER REQUESTOR: GOOD IPM FIT; USE IS COMPATIBLE WITH CULTURAL PEST MANAGEMENT PRACTICES:05/16; GOOD FIT: SEE PREV COMMENTS.: SOR



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14041 PYROXASULFONE (KICHEM)

\* MINT (25AB=HERB FRESH AND DRIED LEAVES SUBGROUP)

UNDER EVALUATION

Reasons for need: weeds. Lake of herbicides available for post-cut mint:07/25;

**REQ STATES** 

IN

NorthEast Region

NorthCentral Region

Southern Region

Western Region

**Reduced Risk** 

### **PCR Use Pattern:**

Make one post-cut broadcast application at 0.1 lb ai/a for residual control during the second mint cycle.

### **HQ Comments:**

XH667 was converted to this new PR# 14041 ofr post-cut use; PR# 10792 is Use Registered, Not Nationally, and for a dormant application timing:03/24 & 07/25/sb; EPA CAUTION:08/25;

### **Nomination Justification:**

(2025 MI) See Prev;

# **IPM Comments from PCR:**

Per Requester: Good Fit; Pyroxasulfone provides residual weed control of weed species common to mint production fields:07/25;

Α

Meyers, Step	hen L (NCR) P	223-IN-DMP	Zidua 85WG applied post-cut at 1.84 oz/a (0.098 lb ai/a) to peppermint growing in a loamy sand. Crop injury ranged from 4 to 20% through the trial and was 17% at 10 weeks after treatment (WAT). Crop height reductions from pyroxasulfone were not different from the weed-free check. Mint biomass not different from untreated. Light weed pressure in trial resulted in low weed counts in herbicide treatments.
Meyers, Step	hen L (NCR) P	 223-IN-DMP	Zidua 85WG applied post-cut at 1.84 oz/a (0.098 lb ai/a) to peppermint growing in a sandy loam. Through 12 weeks after treatment, pyroxasulfone caused little to no crop injury (≤ 7%), no significant crop height reduction, and no significant mint biomass reduction. Light weed pressure in trial resulted in low weed counts in herbicide treatments.



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

14039 \*

S-METOLACHLOR/METOLACHLOR (SYNGEN,UPL NA)

\* MINT (25AB=HERB FRESH AND DRIED LEAVES SUBGROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need: Summer annual weeds. Lack of herbicide or other weed management options after cutting/harvesting mint:07/25;

Α

REQ STATES

IN

NorthEast Region

NorthCentral Region

Southern Region

Western Region

**Reduced Risk** 

### **PCR Use Pattern:**

Make one post-cut broadcast application of Dual Magnum at 1.0 pt/a for residual control during the second mint cycle.

### **HQ Comments:**

This is an export commodity. Syngenta supports as Potential: E/CS Data Before Approval for Residue, and will support pursuing this use only through 24(c) (state) registrations:07/25; EPA CAUTION:08/25;

### Efficacy/Crop Safety (E/CS) Data Required:

Syngenta would like to see at least 1, 1.33, and 2 pt/A tested to be able to assess phytotoxicity at increased product rates:07/25;

#### **Nomination Justification:**

(2025 MI) See Prev;

# **IPM Comments from PCR:**

Per Requester: Good Fit; S-metolachlor provides control of common summer annual weeds found in mint fields:07/25;

 Meyers, Stephen L (NCR)	P23-IN-DMP	RECD	Dual Magnum applied post-cut at 16 fl oz/a (0.95 lb ai/a) to peppermint growing in a loamy sand. Crop injury ranged from 2 to 16% throughout the trial and was 16% at 10 weeks after treatment. Crop height reductions from s-metolachlor were not different from the weed-free check. Mint biomass not different from untreated. Light weed pressure in trial resulted in low weed counts in herbicide treatments.
 Meyers, Stephen L (NCR)	P23-IN-DMP	RECD	Dual Magnum applied post-cut at 16 fl oz/a (0.95 lb ai/a) to peppermint growing in a sandy loam. Slight crop injury (≤ 7%) through 4 weeks after treatment (WAT) but increased to 19% at 8 WAT and was 6% at 12 WAT. No significant crop height reductions seen. Mint biomass was not different from untreated. Light weed pressure in trial resulted in low weed counts in herbicide treatments.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG) COMMODITY (CROP GROUP) PROJECT STATUS

13464 GLUFOSINATE (BASF,UPL NA) ARTICHOKE (GLOBE) (99=MISC GROUP) UNDER EVALUATION

Reasons for need: WEEDS ON BEDS PRIOR TO EMERGENCE OF THE CROP OR TRANSPLANTING. IMPROVE WEED CONTROL IN REQ STATES

THIS CROP IN THE EARLY SEASON AND TO REDUCE WEED PRESSURE LATER IN THE CROP CYCLE; CA/and provides an alternative for disease resistance management:08/23; EPA (HOLD) CAUTION:08/25;

provides an alternative for disease resistance management:08/23; EPA (HOLD) CAUTION:08/25;

NorthEast Region NorthCentral Region Southern Region Western Region A Reduced Risk

#### **PCR Use Pattern:**

REPLY 280; DOSAGE 0.79 LB AI/A, APPLY TO EMERGED WEEDS PRIOR TO PLANTING/ TRANSPLANTING THE CROP AS A PREPLANT BURNDOWN APPLICATION, 1 APPLICATION, RTI 1 DAY, PHI 14 DAYS; MAKE A SINGLE APPLICATION OR MULTIPLE APPLICATIONS UPTO 3 DAYS BEFORE PLANTING/TRANSPLANTING; A MAX OF 1.6 LB AI/A MUST BE APPLIED PREPLANT.

## **HQ Comments:**

**EPA HOLD CAUTION:08/23, 8/24** 

### **Nomination Justification:**

(2022 CA) See previous;(2023 CA) same;(2025 CA) same;

# **IPM Comments from PCR:**

PER REQUESTER: VERY GOOD FIT; GLUFOSINATE PROVIDES A SAFE AND EFFICACIOUS MEANS OF CONTROLLING AN INITIAL FLUSH OF WEEDS PRIOR TO PLANTING. IT IS COMPATIBLE WITH AND ENHANCES OTHER CULTURAL PRACTICES FOR CONTROLLING WEEDS IN THE CROP:07/22; VERY GOOD FIT: SAME: WSR

CA



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG) **COMMODITY (CROP GROUP)** 

PROJECT STATUS

13914 FLUFENACET + METRIBUZIN (ADAMA, BAYER)

CAMAS (99=MISC GROUP)

MFG WILL NOT SUPPORT

Reasons for need: Primarly invasive annual grasses including Cheat grass (Bromus techorum), Ventenata (Ventenata dubia) and Medusahead (Taeniatherum caput-medusae). Control of other broadleaf invasives common in western grass/rangelands e.g. St. johnswort, scotch broom, spotted knapweed would also be useful. Cama bulbs/corms are harvested, primarly by indigenous groups in the West, in native grasslands. Invasive annual grasses (Bromus tectorum, Ventenata dubia, Taeniatherum caput-medusae and others) compete directly with native perennial grasses, forbs and shrubs. They provide fire fuel resulting in more frequent wildfire and the diverse, deep rooted native range transitions to a monoculture of shallow rooted invasive annual grass. Pre-emergent herbicides are commonly used to control these

MT **REQ STATES** 

grasses:10/24;

**NorthCentral Region** 

**Southern Region** 

**Western Region** 

Α

Reduced Risk

PCR Use Pattern:

NorthEast Region

Use the Axiom product. Make one broadcast application at 2 oz/a in fall, but no closer than 180 days before camas harvest.

**HQ Comments:** 

Flufenacet - EPA CAUTION & Metribuzin - EPA (HOLD) Caution:08/25; Bayer Will Not Support:08/25/sb;

#### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Fair Fit; For control of invasive weeds control in native grasslands and increasing abundance wild harvested, indigenous food crops, herbicides could be integrated with seeding native grasses and forbs, and reducing soil disturbance:10/24;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG) COMMODITY (CROP GROUP) PROJECT STATUS

13986 PENDIMETHALIN (BASF,UPL NA) CAMAS (99=MISC GROUP) UNDER EVALUATION

Reasons for need: annual broadleaves and grasses. no herbicides are currently labeled in Camas:06/25; REQ STATES OR

NorthEast Region NorthCentral Region Southern Region Western Region A Reduced Risk

**PCR Use Pattern:** 

Make one foliar broadcast application at 3.8 lb ai/a approximately 30 days prior to camas bulb harvest.

**HQ Comments:** 

BASF advised they are unable to support this project:07/25/sb; leave "Under Eval" & forward to UPL for their consideration:07/25;

**Nomination Justification:** 

(2025 CA) same;

# **IPM Comments from PCR:**

Per Requester: Very Good Fit; Applications of pendimethalin are selective to most perennial plants and will target new weed emergence. Its strong adsorption to soil and sediment particles will likely keep its concentrations in water relatively low:06/25;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

13910 RIMSULFURON (CORTEVA)

CAMAS (99=MISC GROUP)

UNDER EVALUATION

Reasons for need:

Primarly invasive annual grasses including Cheat grass (Bromus techorum), Ventenata (Ventenata dubia) and Medusahead (Taeniatherum caput-medusae). Control of other broadleaf invasives common in western grass/rangelands e.g. St. johnswort, scotch broom, spotted knapweed would also be useful. Cama bulbs/corms are harvested, primarly by indigenous groups in the West, in native grasslands. Invasive annual grasses (Bromus tectorum, Ventenata dubia, Taeniatherum caput-medusae and others) compete directly with native perennial grasses, forbs and shrubs. They provide fire fuel resulting in more frequent wildfire and the diverse, deep rooted native range transitions to a monoculture of shallow rooted invasive annual grass. Pre-emergent herbicides are commonly used to control these grasses:10/24;

REQ STATES MT

NorthEast Region

**NorthCentral Region** 

**Southern Region** 

**Western Region** 

Α

Reduced Risk

#### **PCR Use Pattern:**

Use the Matrix SG product. Make one broadcast application at 2 oz/a in fall, but no closer than 180 days before camas harvest.

# **HQ Comments:**

Refer to rimsulfuron labels for guidance on approved adjuvants for this use pattern. EPA CAUTION:08/25;

#### **Nomination Justification:**

(2025 CA) same;

### **IPM Comments from PCR:**

Per Requester: Fair fit; For control of invasive weeds in native grasslands and increasing abundance wild harvested, indigenous food crops, herbicides could be integrated with seeding native grasses and forbs, and reducing soil disturbance:10/24;



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

**PROJECT STATUS** 

13955 CLOPYRALID (CORTEVA)

FIELD PENNYCRESS (OIL SEED) (99=MISC GROUP)

**UNDER EVALUATION** 

Reasons for need:

emerged weeds prior to crop emergence. very few herbicides are approved for us in this new crop that is grown to produce an oil feedstock for renewable fuels and resulting meal used for animal feed:04/25;

REQ STATES M

MO

**NorthEast Region** 

NorthCentral Region

Southern Region

**Western Region** 

**Reduced Risk** 

#### **PCR Use Pattern:**

Make one application of Stinger HL at 0.15 to 0.3 pt/a to soil and emerged weeds after seeding and before emergence of field pennycress.

#### **HQ Comments:**

XH654 converted to this new pr#. Phytotoxicity is unknown at this time 05/25/ds; EPA GREEN: 08/25

#### **Nomination Justification:**

(2025 MI) See Prev;

### **IPM Comments from PCR:**

Per Requester: Very Good Fit; Adding a new crop to the system increases biodiversity. This herbicide is an additional mode of action to reduce the herbicide resistance issues occurring in the corn and soybean rotation:04/25;

Bernards, Mark

P23-IL-DMP

RECD

Stinger applied once, preemergence, at 4 fl oz/a (0.094 lb ae/a) four days after seeding Golden pennycress in a Greenbush silt loam. Pennycress yield was approximately 13% higher than the untreated check.



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

COMMODITY (CROP GROUP)

**PROJECT STATUS** 

14006 PYROXASULFONE (KICHEM)

FIELD PENNYCRESS (OIL SEED) (99=MISC GROUP)

UNDER EVALUATION

Reasons for need:

request is not targeting a pest, it is for a reduction in plant back interval. Weeds/pests listed on current product label will not change. Winter oilseed crops may be planted after corn/soy; current corn/soy herbicide labels do not allow for 4 month plantback to winter oilseeds. This request is to develop rotational data to support reducing plantback

REQ STATES MO

window:06/25;

NorthCentral Region

Southern Region

**Western Region** 

**Reduced Risk** 

#### **PCR Use Pattern:**

**NorthEast Region** 

Make one application of pyroxasulfone, at labeled rate and traditional timing for corn or soybean, and seed winter field pennycress four months later.

**RECD** 

Α

## **HQ Comments:**

This differs from PR# 13340 (post spray in pennycress) that is for pre-emergence:10/23. This was DMP only pr# XH664 that was converted to this new pr# 14006:06/25/sb; EPA CAUTION:08/25:

### **Nomination Justification:**

(2025 MI) See Prev;

# **IPM Comments from PCR:**

Per Requester: Unknown fit; no additional use sought:06/25;

Bernards, Mark P23-IL-DMP

Three trials conducted over three years, 2020-2022. Zidua SC applied preemergence to spring corn crop at 5 or 10 fl oz/a (0.163 or 0.326 lb ai/a). Averaged across rates, yield of fall planted pennycress was approximately 100%, 119% and 85% of the untreated check in the three trials.



Weed Science Date: 9/2/2025

PR#

**CHEMICAL (MFG)** 

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13803 \*

PYROXASULFONE (KICHEM)

HEMP (99=MISC GROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

**RESIDUE STUDY** 

Reasons for need:

weeds; Only one other preemergence herbicide is registered in hemp (Sonalan / ethafluarlin). Additional, more effective options are needed:02/24; NY-Postemergence use, before ethalfluralin breaks, could extend weed control further into the season and prevent early competitive interactions/allow for crop development:07/24/sb; FL-Industry bed a 2nd preemergent herbicide:08/24;

REQ STATES

VA NY FL

**NorthEast Region** 

**NorthCentral Region** 

Southern Region

Western Region

Α

Reduced Risk

## **PCR Use Pattern:**

Zidua SC herbicide applied once at 2.5 to 5.0 fl oz/a premergence or early postemergence to hemp. Original request indicated 0.5 day re-treat interval. IR-4 HQ suggests that this was probably misunderstood as re-entry interval and should actually be zero since only one application is requested; K-I/Kumiai specifies to use Pyroxasulfone 85 WG instead of Zidua 85 WG:05/24/sb

## **HQ Comments:**

New PR# was received for "Hemp, Industrial", but review as "Hemp" at this time, was created 4/2/24, but actual PCR was rec'd 2/5/24:04/24/sb; based on new pcr review: At exaggerated rates, injury and yield losses have been documented under IS00370 & IS00370 data indicates high levels of weed control from standard and exaggerated rates:04/24/sb; K-I/Kumiai supports as Potential: E/CS data before approval for residue study:05/24/sb

#### **Nomination Justification:**

(2024 FL) See previous comments.;(2024 NY) Control of early season weeds is critical to establish a competitive hemp crop.;(2024 MD) see previous;(2024 CA) same as above;(2024 NJ) See previous comments;(2025 CA) Same;

### **IPM Comments from PCR:**

Per Requester: Good Fit; reduces emergence of weeds and slows their growth, allowing for more timely weed control options later in the season. It may prevent weed pressure from building up to threshold levels. It may control weeds throughout the critical weed free period:02/24; GF-SOR, NER & WSR:08/24; NY:VGF-only one herbicide tool is available in hemp. Alternatives are required by growers:08/24;



Weed Science Date: 9/2/2025

PR# 13066 \* CHEMICAL (MFG)
TOLPYRALATE (ISK)

**COMMODITY (CROP GROUP)** 

HEMP (99=MISC GROUP)

PROJECT STATUS

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR RESIDUE STUDY

Reasons for need:

FOR POST-EMERGENCE CONTROL AGAINST BROADLEAF WEEDS AND MANY ANNUAL GRASSES; THERE ARE NO CONVENTIONAL HERBICIDES FOR WEED CONTROL IN HEMP; NY - Consider topyralate for row middles in transplanted hemp. With the exception of ethalfluralin, there are no synthetic herbicides registered for use in crop. Row middles must remain clean for the movement of workers and to prevent seed production:08/23

**REQ STATES** 

FL VA AZ MD NY OK ID

OH IL

**NorthEast Region** 

NorthCentral Region

Southern Region

В

Western Region

Α

Reduced Risk

## **PCR Use Pattern:**

USE THE SHIELDEX 400SC PRODUCT; MAKE 3-5 POST EMERGENT APPLIC OF 0.026-0.035 LB AI/A, 7-14 DAY INTERVAL, 0-5 DAY PHI; OTHER USE DIRECTIONS PER LABEL

# **HQ Comments:**

NO KEY EXPORT MARKET NOTED; CURRENT LABEL ONLY ALLOWS 0.07 LB AI/A PER YEAR, WHICH IS ONLY 2 APPLIC AT THE RATE REQUESTED; LOWEST PHI ON LABEL IS 35 DAYS:07/20; Severe injury and yield loss observed in 2022 IS00370 trial: 4/23, JPB; Supporting Data was generated in IS00370:06/24/sb

### **Nomination Justification:**

(2021 MD) see previous comments; (2022 MD) see database comments. included in 2022 IS 00370 screening projects. This will generate some data.; (2022 CA) See previous; (2022 FL) See previous comments.; (2023 MI) See Prev; (2023 MD) NY interest is for row middles; (2023 FL) See previous comments.; (2023 NY) The lack of herbicides for broadleaf weed control significantly impacts the ability to manage unwanted vegetation in hemp. Growers in NYS have listed weed control as one of the most critical issues limiting the sustainable production of this novel crop.; (2024 MI) See Prev; (2024 FL) See previous comments.; (2025 CA) Same;

#### **IPM Comments from PCR:**

PER REQUESTER: GOOD IPM FIT; THE SPECTRUM OF WEED CONTROL MATCHES THE HEMP NEEDS:07/20; GOOD FIT: SEE PREVIOUS COMMENTS: NER; GOOD FIT: SEE PREVIOUS COMMENTS: SOR; GF-NCR & SOR:08/24;



Weed Science Date: 9/2/2025

PR#

CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13887 \*

**EPYRIFENACIL (VALENT)** 

HOPS (99=MISC GROUP)

POTENTIAL: E/CS DATA BEFORE APPROVAL FOR

RESIDUE STUDY

Reasons for need:

broadleaf and grass weeds, both annuals and perennial species. Limited tools for weed control/burndown. Concerns about paraguat safety, glufosinate residues, carfentrazone performance.:08/24;

**REQ STATES** 

NY OR

NorthEast Region

Α

NorthCentral Region

**Southern Region** 

Western Region

Α

Reduced Risk

#### **PCR Use Pattern:**

Make 1-3 applications of Rapidicil at 5 fl oz/a plus adjuvant per year along both sides and across the base of the crop. No retreatment interval or preharvest interval submitted. Valent supports a max of 2 applications with a 30 day retreatment interval during dormant and prior to bud break. Maximum annual use of 10 fl oz/A. Target use rate of 5 fl oz/A with a maximum per application use rate of 10 fl oz/A. Labeling will require tank mixture with another burndown herbicide for resistance management/product stewardship:08/24

#### **HQ Comments:**

Key Export Markets: UK, Canada, Australia, Germany, Belgium, China. Email from registrant indicated concern with systemic movement if suckers or other green tissue is exposed to spray. Early input from the registrant indicated only dormant uses in perennial crops:08/24/sb; Valent supports as Potential: E/CS Data Before Approval for Residue with use pattern noted:08/24/sb;

#### **Nomination Justification:**

(2024 NY) Control of broadleaves and grasses in a single application. Broader spectrum of weed control compared to carfentrazone.;(2024 MD) see previous;(2024 CA) same as above;(2025 CA) same;(2025 NY) Hop production faces persistent challenges from both annual and perennial broadleaf and grass weeds, with limited herbicide options available for effective burndown. Commonly used products like paraquat raise significant worker safety concerns, glufosinate has crop injury issues (and possible availability issues; BASF, the manufacturer of Rely will no longer be manufacturing the product and generics do not necessarily have hop listed on their labels), and carfentrazone often provides inconsistent performance. Epyrifenacil offers a broader spectrum of control in a single application, addressing key problem weeds more reliably and safely.:

### **IPM Comments from PCR:**

Per Requester: Good Fit; Limited tools for weed control/burndown. Concerns about paraquat safety, glufosinate residues, carfentrazone performance; GF-NER & Fair Fit-WSR:08/24; NY: GF-add'l moa for control of small annual grasses, add'l active ai for a limited chemical toolbox:08/24;

#### **IPM Comments from Nomination Process:**

; Very Good Fit: With few effective postemergence herbicides labeled for hops, the addition of epyrifenacil introduces a new mode of action, helping to diversify weed management programs and reduce resistance risk. It provides control of small annual grasses and broadleaves, making it a valuable tool in a limited chemical toolbox. Its fit within integrated weed management strategies, lower use rates, and improved safety profile over paraguat support its evaluation in both eastern and western hop-growing regions.: Lynn Sosnoskie



Weed Science Date: 9/2/2025

PR# CHEMICAL (MFG)

**COMMODITY (CROP GROUP)** 

PROJECT STATUS

13972 GLUFOSINATE-P (BASF)

PEANUT (99=MISC GROUP)

RESEARCHABLE, ONLY RESIDUE DATA NEEDED

Reasons for need:

Control of volunteer peanuts prior to planting and terminating failed peanut stand. Currently no effective herbicides are labeled for controlling volunteer peanuts preplant or for terminating failed peanut stands:06/25; NM: Would be an added tool for peanut producers in Eastern NM:08/25;

**REQ STATES** GA NM

**NorthEast Region** 

NorthCentral Region

**Southern Region** 

Western Region

Α

Α

Reduced Risk

#### **PCR Use Pattern:**

Use the Liberty Ultra product (1.76 lb ai/gallon). Make one broadcast preplant or preemergence burndown application at 24 to 30 fl oz/a. Application will include spray-grade ammonium sulfate (AMS) at 3 lb/a. Application should be made with nozzles that deliver a medium to coarse droplet size and should be made mid-day. For optimal efficacy, do not apply Liberty Ultra within 2 hours of sunrise or sunset.

## **HQ Comments:**

Key Export Markets: China, Canada, EU. IR-4 is currently working on glufosinate-ammonium/peanut for the same use pattern under PR#13463:06/25; BASF supports as Researchable, Only Residue Data Needed. They also noted that the residue data generated on (racemic) Glufosinate under PCR # 13463 could be extrapolated to Glufosinate-P for tolerance setting purposes on the peanut commodity:06/25/sb;

#### **Nomination Justification:**

(2025 CA) same; (2025 FL) See requestor comments.;

#### **IPM Comments from PCR:**

Per Requester: Fair Fit; Peanuts have some tolerance to glyphosate thus glufosinate is usually more effective on peanut. Also, helpful for the preplant burndown control of GR-Palmer amaranth and horseweed:06/25;

#### **IPM Comments from Nomination Process:**

; Fair Fit: See requestor comments.: Kristen Searer-Jones

Prostko, Eric P. P25-GA-DMP RECD

Liberty Ultra applied broadcast foliar at 24 fl oz/a (0.33 lb ai/a) over 15 day-old 'TIFNV-HG' peanuts growing in a Tifton sand, to simulate control of volunteer peanuts in a peanut replanting scenario. Peanut control was 92% at 5 days after application (DAA) and remained > 76% through 19 DAA.

Total # of PRs: 91

Total # of Trials: 134

Total # Chemical: 43

Total # Commodity: 59