



Environmental Horticulture Program Research Project Sheet

<https://www.ir4project.org/ehc/ehc-registration-support-research/env-hort-extension-resources/>

Project Name: Sedge and Nutsedge Efficacy

New	Ongoing	Completed	Duration if ongoing or completed:
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Project Description:

Research Project Abstract (if available):

Target Species (Phytotoxicity, or common and Latin name of arthropod, pathogen, weed):

Flatsedge, Rice (*Cyperus iria*)
 Nutsedge, Purple (*Cyperus rotundus*)
 Nutsedge, Yellow (*Cyperus esculentus*)
 Sedge, Annual (*Cyperus sp.*)
 Sedge, Compressed (*Carex acuta*)

Target Crops (list tested crops if ongoing or completed project)

None
Hydrangea arborescens
Quercus palustris
Quercus phellos

Target Product(s)(list tested products or numbered compounds if ongoing or completed project)	
Basagran Herbicide (Bentazon)	Marengo G (Indaziflam 0.0224%)
Basagran T&O Herbicide (Bentazon)	Mesotrione 4SC (Mesotrione)
BroadStar 0.25G (Flumioxazin)	Mesotrione G (Mesotrione)
BroadStar 0.25G VC1604 (Flumioxazin)	Pennant Magnum (S-Metolachlor)
Casoron 4G (Dichlobenil)	RoundUp (Glyphosate)
Dismiss 4F (Sulfentrazone)	SedgeHammer (Halosulfuron)
Eptam EC (EPTC)	Showcase (Trifluralin + Isoxaben + Oxyfluorfen)
Eptam G (EPTC)	Snapshot 2.5TG (Trifluralin + Isoxaben)
F6875 0.3G (Sulfentrazone + Prodiamine)	Sulfentrazone 0.2G (Sulfentrazone)
F6875 4SC (Sulfentrazone + Prodiamine)	SureGuard 51WDG (Flumioxazin)
Fiesta Herbicide (Iron HEDTA)	Tower (Dimethenamid-p)
Fortress (OHP1701B) (isoxaben + dithiopyr)	V-10142 0.5G (Imzasulfuron)
Freehand G (Dimethenamid-p + pendimethalin)	V-10142 75WG (Imzasulfuron)
Gemini Granular (Prodiamine + isoxaben)	V-10233 76WG (Flumioxazin + pyroxasulfone)

Product Registration and Research Status			
	Fully Screened (also includes standards)	Partially Screened through IR-4 ¹	Need Data Across Species ?
Labeled Generally & Commercialized			
Labeled Generally But NOT Commercialized			
Labeled for Specific Species & Commercialized	Basagran Broadstar Dismiss		



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	Eptam Freehand Pennant Magnum Tower		
Labeled for Specific Species but NOT Commercialized			
Not yet registered or Labeled		Casoron F6875 Fiesta Fortress Gemini Marengo SedgehammerV-10142 Sulfentrazone Sureguard V-10233	
No longer available for development			
* IR-4 Data contributed to registration decision – either adding pest to label or not pursuing further research 1 At least one species screened fully			

PROS	CONS
Mentioned as a major weed in the 2021 Grower Survey	Adequate efficacy of sedge with current products
# of products on sedge (various rates)	
Potential for new products and actives: Primasulfuron, topremazone, Pylex, Vexist	
Over-the-top and directed spray	
Comments: Would also need to test false kyllinga	

IR-4 Efficacy Trials to Date

Average rating on a scale of 1 – 5 with 1 = 0 to about 50% efficacy (not effective) and 5 = 95 to 100 efficacy (very effective); minimum to maximum rating; number of trials (See table on next page). For product/insect combinations that are blank, IR-4 has not screened this combination.

‘Labeled’ indicates that this disease species or genera is listed on the label. A rating of 2 or lower is considered unacceptable efficacy (*red text*). A rating of 3 or higher is considered commercially acceptable (black text). Non-labeled, completed product/disease combinations (3 or more trials) with an average rating of 3 or higher are highlighted with *green text*. For disease/product combinations that are blank, IR-4 has not screened this combination.

MOA	Product (Active Ingredients)	Flatsedge, Rice (<i>Cyperus iria</i>)	Nutsedge, Purple (<i>Cyperus rotundus</i>)	Nutsedge, Yellow (<i>Cyperus esculentus</i>)	Sedge, Annual (<i>Cyperus sp.</i>)	Sedge, Compressed (<i>Carex acuta</i>)
unknown	Fiesta Herbicide (Iron HEDTA)			1.0 (1 - 1) n2		
WSSA 14	BroadStar 0.25G (Flumioxazin)			4.0 (4 - 4) n1 Labeled		
WSSA 14	BroadStar 0.25G VC1604 (Flumioxazin)				1.0 (1 - 1) n1	

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WSSA 14	Dismiss 4F (Sulfentrazone)			4.0 (4 - 4) n1 Labeled		
WSSA 14	Sulfentrazone 0.2G (Sulfentrazone)	2.5 (1 - 4) n2		1.0 (1 - 1) n2		
WSSA 14	SureGuard 51WDG (Flumioxazin)				5.0 (5 - 5) n2	
WSSA 14 + WSSA 15	V-10233 76WG (Flumioxazin + pyroxasulfone)				5.0 (5 - 5) n2	
WSSA 14 + WSSA 3	F6875 0.3G (Sulfentrazone + Prodiamine)			1.0 (1 - 1) n2		
WSSA 14 + WSSA 3	F6875 4SC (Sulfentrazone + Prodiamine)			3.0 (3 - 3) n1		
WSSA 15	Pennant Magnum (S-Metolachlor)			4.0 (1 - 5) n4 Labeled	5.0 (5 - 5) n1	
WSSA 15	Tower (Dimethenamid-p)			3.0 (1 - 5) n3 Labeled		
WSSA 15 + WSSA 3	Freehand G (Dimethenamid-p + pendimethalin)			5.0 (5 - 5) n2 Labeled		4.0 (4 - 4) n1
WSSA 2	SedgeHammer (Halosulfuron)	5.0 (5 - 5) n1	3.0 (3 - 3) n1	4.3 (2 - 5) n6		
WSSA 2	V-10142 0.5G (Imzasulfuron)			4.0 (3 - 5) n2		
WSSA 2	V-10142 75WG (Imzasulfuron)	5.0 (5 - 5) n1	4.0 (4 - 4) n1	3.5 (3 - 5) n4		
WSSA 20	Casoron 4G (Dichlobenil)			3.0 (3 - 3) n2		
WSSA 21 + WSSA 3	Fortress (OHP1701B) (isoxaben + dithiopyr)				1.0 (1 - 1) n1	1.0 (1 - 1) n1
WSSA 29	Marengo G (Indaziflam 0.0224%)				1.0 (1 - 1) n1	
WSSA 3 + WSSA	Gemini Granular (Prodiamine + isoxaben)				2.0 (2 - 2) n1	3.0 (3 - 3) n1
WSSA 3 + WSSA 21	Snapshot 2.5TG (Trifluralin + Isoxaben)			1.0 (1 - 1) n1		2.0 (2 - 2) n1
WSSA 6	Basagran Herbicide (Bentazon)			5.0 (5 - 5) n1 Labeled		
WSSA 6	Basagran T&O Herbicide (Bentazon)			5.0 (5 - 5) n2 Labeled		
WSSA 8	Eptam EC (EPTC)			3.0 (3 - 3) n1 Labeled		
WSSA 8	Eptam G (EPTC)			5.0 (5 - 5) n1 Labeled		