9-09-24 - Revised to correct numbers for total use

NEBRASKA
Good Life. Great Roots.
DEPARTMENT OF AGRICULTURE

Jim Pillen, Governor

September 5, 2024

Mr. Eric W. Bohnenblust, Ph.D, Chief
Minor Use and Emergency Response Branch (MUERB)
USEPA Office of Pesticide Programs 7505T
1200 Pennsylvania Ave. NW
Washington, D.C. 20460-0001

Dear Dr. Bohnenblust:

The Nebraska Department of Agriculture (NDA) hereby submits a request for a specific emergency exemption for the use of unregistered herbicide metamitron, potentially labeled as Goltix 700 SC, for use on sugarbeets to control glyphosate-resistant Palmer amaranth. This is the third request for NDA, and similar requests are being considered by Colorado, Wyoming, Idaho, and Oregon. The request for Nebraska is for the application of Goltix 700 SC Herbicide on sugarbeets at 64 fluid ounces per acre as a single pre-emergent application.

Sugarbeet growers have expressed that the situation represents an urgent and non-routine situation due to significant economic losses that have been occurring in fields infested with glyphosate resistant Palmer amaranth. They further indicate the resistant weed range is expanded rapidly to non-infested fields and may now infest over 65% of the traditional sugarbeet growing fields in the last four years. Grower accounts from 2021 and 2022 have indicated many fields have had to be abandoned due lack of beet root size or root digging equipment being plugged constantly by Palmer amaranth roots. This is a resubmission of the previously approved Section 18 File Number 23-NE-02 which yielded great success with our growers in the 2024 growing season.

NDA has assigned the Section 18 File Number **24-NE-01** for this request. If you have any questions regarding this specific exemption request, please contact either Tammy Zimmerman or Libby Smith in our Department's Animal and Plant Health Protection Division at (402) 471-2351.

Sincerely,

NEBRASKA DEPARTMENT OF AGRICULTURE

Department of Agriculture
PO Box 94947
Lincoln, NE 68509-4947

nda.nebraska.gov

An Equal Opportunity/Affirmative Action Employer

Sherry Vinton, Director
Office 402-471-2341

Sherry Vinton
Director

Copies:
Tammy Zimmerman, NDA/APHP
Mike Daniels, EPA Region 7 Nebraska Project Officer
Diane Reynolds, ADAMA
Dr. Rebecca Larson, Western Sugar Cooperative
Dr. Nevin Lawrence, University of Nebraska Panhandle Research and Extension Center
Jolynn Morris, Colorado Department of Agriculture

Attachments:
Section 18 Emergency Exemption Request Narrative
Request Letter and supporting data from Western Sugarbeet Association
Proposed label for Goltix 700 SC
Letter of Support from ADAMA
Four evaluation studies of metamitron on sugarbeets

9-09-24 - Revised to correct numbers for total use

REQUEST FOR SPECIFIC EXEMPTION 24-NE-01

METAMITRON on SUGARBEETS

Submitted by the Nebraska Department of Agriculture

I. CONTACT PERSONS AND QUALIFIED EXPERTS

A. STATE CONTACT PERSONS

Michael Murren, Pesticide Registration Specialist
Nebraska Department of Agriculture (NDA)
PO Box 94756, Lincoln, NE 68509
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Elizabeth Smith, Pesticide Program Manager
Nebraska Department of Agriculture (NDA)
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Phone: (402) 471-6882
elizabeth.smith@nebraska.gov

B. QUALIFIED EXPERT

Nevin Lawrence, PhD, Integrated Weed Mgt Specialist
University of Nebraska
Panhandle Research and Extension Center
4502 Ave. I
Scottsbluff, NE 69361
Phone: (308) 632-1230
Nlawrence2@unl.edu

C. COMPANY CONTACT

Grower Representative

Rebecca Larson, PhD
VP, Chief Scientist and Government Affairs
Western Sugar Cooperative
Scottsbluff, NE
(308) 304-3982
rlarson@westernsugar.com

Registrant

Diane Reynolds, PhD
Product Strategy Leader
ADAMA US
3120 Highwoods Blvd, Suite 100
Raleigh, NC 27601
(979) 218-7636
Diane.reynolds@adama.com

II. DESCRIPTION OF PESTICIDE REQUESTED

Pesticide Trade Name:	Goltix 700 SC (currently unregistered)
Registrant:	ADAMA.S.
EPA Reg. No.:	Not Registered in US
Active Ingredient:	metamitron 58.3% a.i. by weight

III. DESCRIPTION OF PROPOSED USE

A. Sites to be Treated:

Sugarbeets planted in 14 counties in the panhandle and southwest corner of Nebraska with known infestations of glyphosate-resistant Palmer amaranth (GRP).

B. Method of Application:

Ground application only.

C. Rate of Application

One application at 64 fluid ounces of product per acre.

D. Maximum Number of Applications:

One, apart from a replant scenario in fields treated with Goltix 700 SD alone.

E. Total number of acres to be treated:

The sugarbeet growers have indicated there are 14 counties with the heaviest known populations of GRP, and those counties account for approximately 47,025 acres planted annually. However, NDA is requesting the ability for an additional application for replanting due to crop failure.

F. Total amount of pesticide to be used:

Using the maximum rate allowed by the emergency use label (64 fluid ounces product per acre per year) times the number of acres potentially treated (47,025) results in an estimated total amount of pesticide to be used of 3,009,600.00 fluid ounces, or 23,512.50 gallons of product. Goltix 700 SC contains 5.84 pounds of active ingredient per gallon of formulated product, which would therefore account for a total potential 137.313 pounds of active ingredient applied per season (year). With the permitting of a replant application when a uniform stand fails to produce, the maximum amount that could be applied if every planting required a replant application, and met the requirements of one, would be 274,626 pounds of active ingredient.

G. Use Period

The proposed use indicates growers will need to apply one 64 fluid ounce per acre as a single pre-emergent (PRE) application after planting. The growers have indicated sugarbeets are typically planted no earlier than April 1st meaning the first application would be made about that time, and beets may be planted as late as May 1st, meaning the last application may be made around May 15th.

H. Other Applicable Restrictions:

The Goltix 700 SC label prohibits use through irrigation systems, by aircraft, when wind speeds exceed 15 mph or are below three mph, during periods of temperature inversion, or within 100 feet of aquatic areas. NDA notes the section of the proposed label instructs the user to not cultivate or apply within 10 feet of an aquatic area to allow growth of a vegetative buffer strip. The use precautions also prohibit the use of treated sugarbeet leaves for food or feed.

I. Overview of Emergency Conditions:

At its simplest level, the situation is that sugarbeet fields with GRP have no economically viable alternatives for control of the weed. Fields with even a few individual Palmer amaranth plants per square meter can cause significant economic loss.

Dr. Nevin Lawrence of the University of Nebraska and Dr. Andrew Kniss of the University of Wyoming have worked cooperatively over the last four years on the problem. Dr. Lawrence has provided NDA with research data and personal accounts of the current emergency situation. The following summarizes those comments:

Based on a field study using replicated small plots conducted in western Nebraska, Palmer amaranth at a very low density of 0.5 plants per square meter causes a yield loss of 89%. The Palmer amaranth density required to cause a 50% yield loss was 0.06 plants per meter of row. The average density of seed production was 189,600 seeds per square meter (Schultz and Lawrence 2019).

These results show clearly that when uncontrolled, Palmer amaranth does cause yield loss that exceeds 20%, and it causes economic loss that exceeds 20%. Palmer amaranth emergence during the first four weeks after sugarbeet planting can cause very high yield loss. Surviving Palmer amaranth plants produce hundreds of thousands of seeds per square meter. This contribution to the soil seed bank has implications for land value and future production potential.

NDA is providing by way of attachment research project summary reports from Dr. Lawrence evaluating the efficacy of metamitron and alternate herbicides tested at various locations in western Nebraska, Colorado and Wyoming.

IV. ALTERNATIVE METHODS OF CONTROL

A. Herbicides

The following active ingredients are currently registered in Nebraska and labeled for use to control Palmer amaranth in sugarbeets: glyphosate (only glyphosate tolerant varieties), glufosinate-ammonium (pre-plant burn-down only), acetochlor, dimethenamid-P, trifluralin and S-metolachlor. The active ingredient acifluorfen was allowed under Section 18 for use on sugarbeets in 2021, and a brief discussion on this product is included below. The following discussion identifies the

use pattern and reasons why the named herbicides are either ineffective or losing effectiveness on control of GRP.

Glyphosate

The large majority of sugarbeets planted in the state are glyphosate tolerant varieties. While glyphosate has provided reliable broadleaf weed control since glyphosate-tolerant sugarbeet varieties were introduced, glyphosate weed resistance in Palmer amaranth was first confirmed in Nebraska field surveys conducted by Dr. Nevin Lawrence in the summer of 2017 (see Image 1). The field in question was treated with glyphosate, clopyralid, cycloate, ethofumisate and betamix at four times the labeled rate (research plot). Since 2017, GRP infestation in Nebraska sugarbeet fields has increased to approximately 30% of planted acres. In 2020 approximately 1,000 acres of sugarbeets were abandoned before harvest (100% yield loss) due to Palmer amaranth infestations that would have resulted in refusal of the harvested crop by the sugar refiner. In 2021, 2022 and 2023, Western Sugar Cooperative reported more fields were abandoned due to GRP infestation, and they now believe as much as 65% of the production area for growers is infested with the weed.

Image 1. Note viable seed heads on plant as highlighted.

Cycloate

Cycloate is applied to sugarbeets after planting but before emergence. It has not demonstrated control of broadleaf weeds that have already emerged after the crop was planted, therefore it is not considered an acceptable alternative for early emerged weeds.

Ethofumisate

Recent research by Dr. Nevin Lawrence has demonstrated that the addition of ethofumisate in a tank mix with metamitron has provided an acceptable level of control of GRP when used together. Dr. Lawrence will continue to research the reasons why the two herbicides together are more effective than when used as single product applications. Please refer to his data found in the attachments.

Acetochlor, Dimethenamid-P and S-metolachlor

The Group 15 herbicides acetochlor, dimethenamid-P and S-metolachlor all require application to sugarbeets no earlier than the crop reaching the two true-leaf stage. This stage of crop growth can sometimes take four to five weeks after planting to be reached, and in that period of time early emerged Palmer amaranth can easily reach four inches in height. Group 15 herbicides have no activity on emerged weeds, making these products ineffective alternatives.

Clopyralid

Clopyralid has demonstrated minimal control of amaranth species and is ineffective for control of Palmer amaranth in Nebraska fields.

Sodium Acifluorfen

While sodium acifluorfen (trade name Ultra Blazer) is not currently registered for use on sugarbeets, it was granted a Section 18 exemption in 2021 for control of GRP. The experience by growers in 2021 was not favorable, with limited weed control and unacceptable crop damage resulting. Agronomists and Dr. Lawrence believe this is due in part to the soils in NE, WY and CO being exceptionally low in organic matter, sometimes below 1%. Western Sugar Cooperative has stated that Ultra Blazer is no longer considered an acceptable alternative herbicide for GRP.

B. IPM Weed Control Alternatives

Mechanical/Manual Weed Control

Historically, sugarbeet growers used mechanical cultivation followed by manual field labor using hoes to weed fields. Over the course of the last 30 years, the practicality of using manual labor has decreased with the advent of glyphosate tolerant sugarbeet varieties, which allowed growers to transition to a minimum tillage system. Nearly all acres of sugarbeets in Nebraska are now planted to glyphosate tolerant varieties, and growers no longer seek out manual labor. With no demand for manual labor, labor contractors have had no incentive to dedicate migrant labor for an uncertain market. Hiring manual labor also does not make sense for glyphosate tolerant sugarbeets, since the majority of other weed species are controlled, and the cost of production already exceeds a break-even rate in most years. Growers are therefore hesitant to return to mechanical/manual labor weed control due the uncertainty of labor availability.

Biological Weed Control

As of this request, NDA is unaware of any biological control of amaranth weed species.

V. EFFICACY OF PROPOSED USE UNDER SECTION 18

Dr. Nevin Lawrence has provided NDA with data for four years of research on metamitron field trials (see attachments). There were sites in NE and WY in all four years in order to provide relevant locations to sugarbeet production areas used by Western Sugar Cooperative growers. Dr. Lawrence's work focused on the application rates used in Europe in the 2019 and 2020 plots, but then began to include lower rates of 20, 25 and 50 fluid ounces per acre in the 2021 and 2022 trials in order to determine a lower threshold of acceptable control.

Data for 2021 and 2022 determined that acceptable control of GRP was possible using metamitron alone at 32-50 fluid ounces per acre with better control when ethofumisate was added to the tank mix at 32 fluid ounces per acre.

VI. DISCUSSION OF EXPECTED RESIDUES IN FOOD

There are currently no food tolerances of metamitron approved by EPA for any food commodity in the United States. The registrant has indicated they have submitted European data to EPA that was used for the EU registration, but NDA does have access to that data.

VII. DISCUSSION OF HUMAN HEALTH AND ENVIRONMENTAL RISK INFORMATION

As of the date of submission, NDA has received no human health or environmental risk data from the registrant but has been told that data from the EU for the Section 3 request for fruit thinning has been submitted to the Agency.

NDA notes the European label for Goltix 700 SC provided to NDA in August 2022 appears to have a Caution signal word, with precautionary statements for moderate eye irritation and harm if swallowed. The environmental hazards section of the label identifies

characteristics associated with chemicals detected in groundwater, i.e. the herbicide is considered leachable into groundwater especially where the water table is shallow.

The Nebraska Game and Parks Commission Wildlife Division noted during their review of the label that there were significant precautions listed for applications in the vicinity of aquatic areas such as lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, and estuaries. While much of the sugarbeet growing areas of NE, CO and WY are arid by geographic location, there are some rivers, creeks and irrigation canals that carry water during the period intended for application. The area can receive heavy rainfall that would potentially lead to surface runoff into these water features. The label appears to address these concerns by both prohibiting aerial application and also prohibiting ground applications within 100 feet of the aquatic areas listed above. The label also prohibits cultivation and application within 10 feet of aquatic areas in order to allow a vegetative buffer to grow.

VIII. COORDINATION WITH OTHER AFFECTED FEDERAL, STATE, AND LOCAL AGENCIES

NDA generally notifies other state and Federal agencies when Section 18 emergency exemptions are determined to potentially impact vulnerable populations or habitat of threatened or endangered species. In the case of the current emergency exemption, NDA has notified the regional office of EPA and the Nebraska Game and Parks Commission, which has state authority for threatened and endangered species. There are no Federally recognized Indian Tribes located in the areas where sugarbeets are produced. NDA is coordinating this request with the Colorado Department of Agriculture, which has indicated they will also submit a similar request for sugarbeet producers in Colorado. Wyoming, Idaho, and Oregon may also be submitting similar requests.

IX. NOTIFICATION OF REGISTRANT

NDA has communicated with ADAMA regarding the use of metamitron on sugarbeets under an emergency exemption and has received a letter of support for the proposed emergency use.

X. ENFORCEMENT PROGRAM

The NDA has enforcement authority granted to it by the Nebraska Pesticide Act to ensure monitoring and enforcement of any Section 18 use. The NDA also has a cooperative agreement with the U.S. EPA to conduct federal inspections using federal credentials in the case of pesticides used on Federal land or Indian Country. In the case of Section 18 emergency exemptions, the Nebraska Pesticide Act provides for a permitting requirement for all distribution of the exempted pesticide that will be sold or applied under the emergency exemption. The sugarbeet producer representative has indicated that growers will either apply the herbicide themselves or hire commercial application, and the herbicide, being unregistered and otherwise unavailable in the United States, will likely be transported to Nebraska through a highly controlled distribution by Western Sugar Cooperative. NDA will issue all wholesale and retail dealers distributing the product under the emergency exemption a state permit to distribute the product, which in turn requires the permit holder to report all net sales of the herbicide by a specified date, so that NDA can in turn report that information to EPA.

XI. PROGRESS TOWARD REGISTRATION

This is the third request by the NDA for the use of metamitron on sugarbeets in Nebraska. The registrant has indicated they have submitted a Section 3 registration request to EPA for use of the product as a pome fruit thinner, but not for use on sugarbeets which is currently under review.

XII. INFORMATION REQUIRED FOR A SPECIFIC EXEMPTION

A. Name of the Pest
Palmer amaranth (*Amaranthus palmeri)*

B. Discussion of the Events Which Brought About the Emergency Condition

According to the University of Nebraska Weed Management Specialist for sugarbeet producing areas of the state, GRP was first positively identified in sugarbeet fields in 2016 and has since rapidly spread to many counties that produce sugarbeets. It is speculated, but not proven, that the original infestation came from eastern or southern areas of the state where glyphosate resistance has been well documented for over 10 years. Image 2 below shows a 2019 map of

herbicide resistant populations of Palmer amaranth in the state. Palmer amaranth has demonstrated resistance to more than just glyphosate herbicide. (Source: University of Nebraska)

Since the data for the map below was collected, four years of experience has proven nearly all counties in Nebraska that produce row crops have experienced some degree of infestation of Palmer amaranth, with many of those areas showing herbicide resistance in the Palmer populations.

Image 2. Distribution of herbicide resistant Palmer amaranth in Nebraska as of 2019

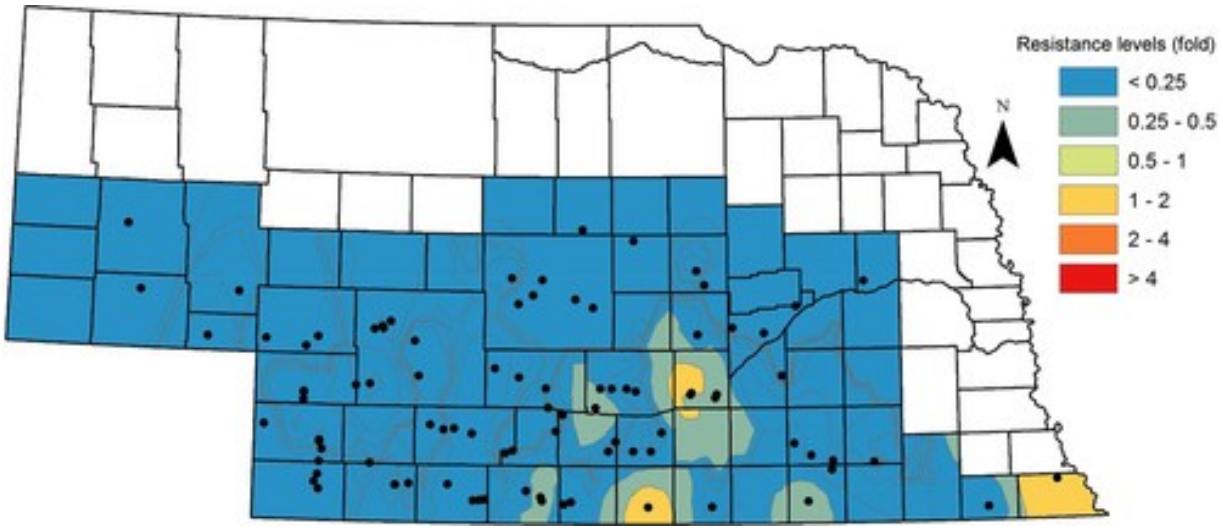
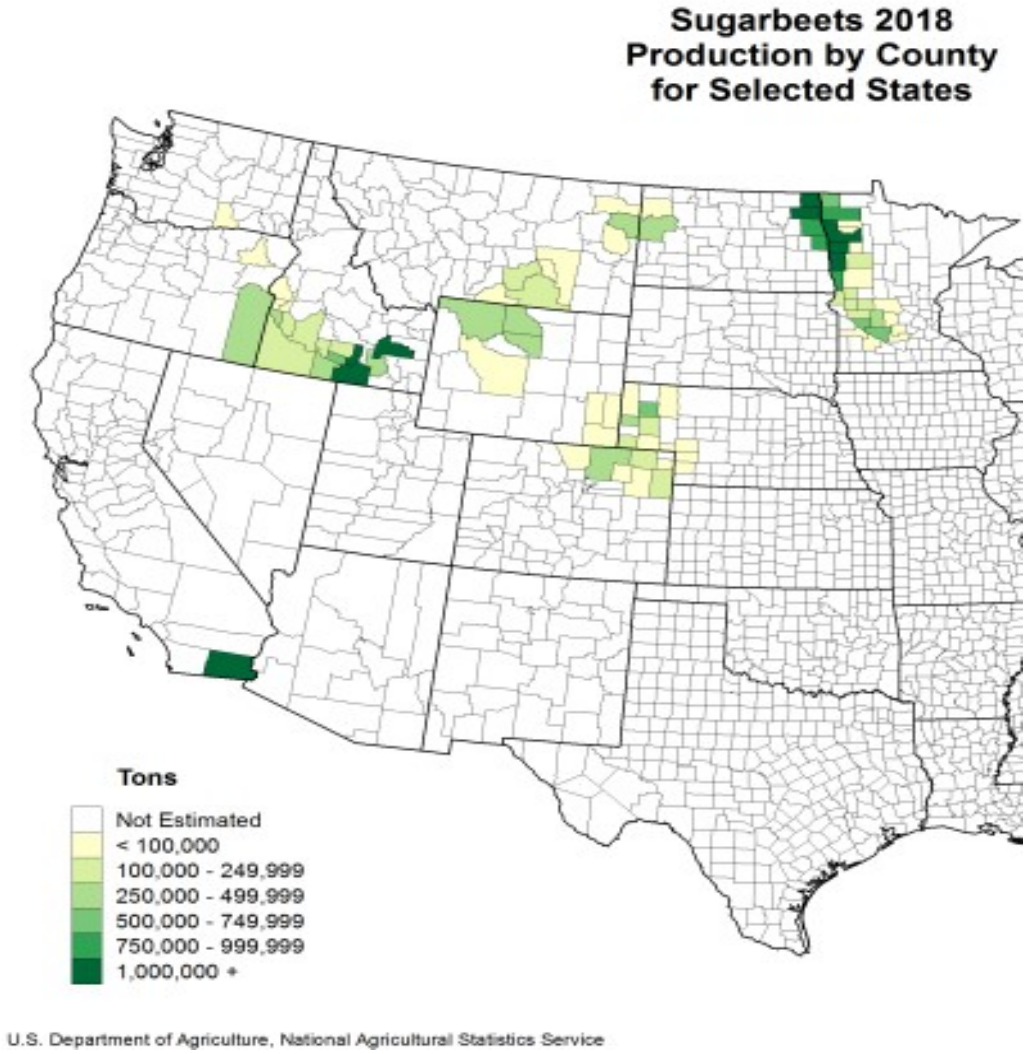


Image 3 below shows a USDA NASS map of sugarbeet producing counties in the western United States. Note the overlap of sugarbeet production areas in Nebraska to that of known herbicide resistant populations of Palmer amaranth shown in Image 2. Current known GRP populations overlap with the majority of counties where sugarbeet production occurs in Nebraska.

Image 3.



U.S. Department of Agriculture, National Agricultural Statistics Service

Beginning in 2017, UNL researchers conducted surveys of sugarbeet fields for glyphosate resistance in Palmer amaranth. That first year found six of 44 randomly selected samples found to be resistant to glyphosate. Additional surveys have been conducted each year since, and while data is not readily available for the most recent years, estimates have been made by the University of Nebraska Weed Management Specialist that the number of fields found with GRP populations has doubled every year since 2017, with estimates provided by the sugarbeet growers indicating approximately 59% of all sugarbeet fields were infested with GRP in 2022. This will be discussed further in the section on Significant Economic Loss. It is because of the demonstrated rapid increase in acres of GRP that the growers believe an urgent and nonroutine situation exists.

C. Discussion of Anticipated Risks to Threatened and Endangered Species

Two endangered or threatened plant species have been identified with possible habitat in counties where sugarbeets are grown: Blowout Penstemon (Box Butte, Morrill and Garden County) and Colorado Butterfly Plant (Kimball County). These plant species inhabit uncultivated grasslands or riparian/wetland habitats which are generally not close to irrigated row crop areas that produce sugarbeets. NDA does not anticipate any off-site drift or movement of metamitron used under the emergency exemption that will impact known or historical habitat for these two species.

D. Harvest Date:

Harvest of sugarbeets in western Nebraska typically starts between September 1 to 10, extending into early November, weather permitting.

XIII. DISCUSSION OF SIGNIFICANT ECONOMIC LOSS

Data shown in the following tables was provided by the Vice-President for Science and Government Affairs for Western Sugar Growers Cooperative, Rebecca Larson, PhD. In her communication with NDA, Dr. Larson explained that the economic impact of GPR on sugarbeets is primarily due to yield loss rather than loss in the sugar content of the beet root. For this reason, NDA's economic assessment is quantitative rather than qualitative.

Table 1. Crop value and normal net revenue in fields without GRP for past five years (data for 2021, 2022, and 2023 provided by Western Sugar Cooperative)

Year	Yield (Tons/A)[1]	Price/Ton	Gross Revenue ($/A)	Cost of Production ($/A)[2]	Net Revenue $/A
2024	31.0	$60.00	$1,860.00	$1,122.14	$737.86
2023	29.0	$41.00	$1,189.00	$1,122.14	$66.86
2022	30.0	$43.75	$1,312.50	$1,345.00	$(32.50)
2021	31.9	$46.00	$1,467.40	$1,170.00	$297.40
2020	30.72	$44.50	$1,367.04	$1,171.00	$196.04
2019	25.67	$42.46	$1,089.95	$1,171.00	$(81.05)

NOTES: [1] Assumptions are based on historical yields and prices and NO glyphosate resistant Palmer amaranth in field. [2] Cost of production validated by USDA-FSA during WHIP+ calculations for 2018/2019 crop year.

Table 2: Crop value and net revenue for fields with GRP for past five years (data for 2021, 2022 and 2023 provided by Western Sugar Cooperative)

Year	Yield (Tons/A)[1]	Price/Ton	Gross Revenue ($/A)	Cost of Production ($/A)[2]	Net Revenue $/A
2024	11	$60.00	$660.00	$1,322.14	$(662.14)
2023	21.0	$41.00	$861.00	$1,322.14	$(461.14)
2022	21.0	$43.75	$918.75	$1,545.00	$(626.25)
2021	25.52	$46.00	$1,173.92	$1,170.00	$3.92
2020	25.61	$44.50	$1,139.65	$1,171.00	$(31.35)
2019	18.25	$42.46	$774.90	$1,171.00	$(396.10)

NOTES: [1] Yields are based on harvest reports from weed infested fields, but only take into account those fields, not fields without GRP. [2] Cost of production validated by USDA-FSA during WHIP+ calculations for 2018/2019 crop year; 2022 reflects inflation impacts plus additional control measures on cost of production. Worst case scenario for increase to cost of production would be $500/A in all control measures for GRP fields.

Table 3: Tier 1 Economic Analysis: Yield Loss Due to GRP (GRP fields)

(Data represent assumptions used for Table 1, and actual yield data provided by Western Sugar Cooperative.)

Year	Normal Yield (Tons/A)	GRP Fields Yield (Tons/A)	Yield Reduction (Tons/A)	Percent Yield Reduction
2024	31	11	20	64.5%
2023	29.0	21.0	8.0	27.6%
2022	30.0	21.0	9.0	30.0%

Year	Normal Yield (Tons/A)	GRP Fields Yield (Tons/A)	Yield Reduction (Tons/A)	Percent Yield Reduction
2021	31.9	25.52	6.38	20.0%
2020	30.72	25.61	5.11	16.63%
2019	25.67	18.25	7.42	28.9%
5-yr AVE	29.458	22.276	7.182	24.38%

NOTES: Growers have indicated the number of GRP fields has doubled in each year since 2017 to a point were 65% of all planted acres in 2022 and 2023 was estimated to be infested.

Based on the data shown in Table 3, Tier 1 analysis for simple yield loss demonstrates at least 20% loss in all three of the last three years with a five-year average of 24.38%.

TABLE 4: Tier 2 Economic Analysis: Gross Revenue Loss
(Using same assumptions as in Tables 1 and 2.)

Year	Gross Revenue[1] ($/A)	Gross Revenue[2] ($/A)	Revenue Gain/Loss ($/A)	Percent Loss
2024	$1,186.00	$660.00	$(526.00)	44.4%
2023	$1,189.00	$861.00	$(328.00)	27.6%
2022	$1,312.50	$918.75	$(393.75)	30.0%
2021	$1,467.40	$1,173.92	$(293.48)	20.0%
2020	$1,367.04	$1,139.65	$(227.39)	16.6%
2019	$1,089.95	$774.9	$(315.05)	28.9%
5-yr AVE	$1,285.18	$981.09	$(311.04304.09)	25.1%

NOTES: [1] Normal gross revenue in fields without GRP. [2] Gross revenue in GRP fields.

Based on the data shown in Table 4, Tier 2 analysis for percentage of loss in gross revenue shows loss exceeded 20% in two of the last three years, with a 5-year average also above the 20% loss target.

Table 5: Tier 3 Economic Analysis: Loss of Net Operating Revenue (Change in net revenue comparing sugarbeet fields with and without GRP.)

Year	Normal Net Revenue (Table 1)	Fields with Resistant Weeds Net Revenue (Table 2)	Change in Net Revenue	Percent Change in Net Revenue Loss
2024	$737.86	$(662.14)	$(1,400.00)	190%
2023	$66.86	$(461.14)	$(528.00)	790%
2022	$(32.50)	$(626.25)	$(593.75)	1,827%
2021	$297.40	$3.92	$(293.48)	98.7%
2020	$196.04	$(31.35)	$(227.39)	115%
2019	$(81.05)	$(396.10)	$(315.05)	389%

Showing the net revenue for fields with no GRP in Table 1 and the net revenue for fields with GRP in Table 2 allows a comparison of the increase or decrease in net revenue between those fields, as well as how large that change in net revenue was on a percentage basis. Tier 3 analysis in Table 5 indicates net operating revenue losses increased between normal fields and GRP infested fields more than 50% in all of the last five years.

ATTACHMENTS

Western Sugar Cooperative Research Committee Evaluations by Nevin Lawrence, PhD for years 2019 through 2022 (five documents)

Proposed label for Goltix 700 SC as provided by ADAMA

ADAMA US
8601 Six Forks Road, Building 1, Suite 300
Raleigh, NC 27615
USA
Telephone 866-406-6262
ADAMA.COM

August 23, 2024

Elizabeth Smith
Pesticide/Fertilizer Program Manager
Nebraska Department of Agriculture
Pesticide/Fertilizer Program
245 Fallbrook Blvd. P.O. Box 94756
Lincoln, NE 68509

RE: Request for Specific Exemption
Metamitron on Sugarbeets

Dear Ms. Smith,

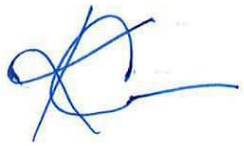
On behalf of Makhteshim Agan of North America, Inc. (d/b/a ADAMA), I hereby submit a Letter of Support for the approval of this request for Specific Exemption by the Nebraska Department of Agriculture for the use of Goltix 700 SC, containing metamitron as the active ingredient, on sugarbeets. Please see required information below in support of the Specific Exemption.

Acknowledgement by Registrant (40 CFR 166.20(a)(9))
Adequate quantities of product are expected to be available in time for application of Goltix 700 SC on sugarbeets during the 2025 season. ADAMA and EPA have been in discussion regarding import of technical material, production timing, and general support of the Specific Exemption request.

Progress Toward Registration (40 CFR 166.25(b)(2)(ii))
ADAMA has previously submitted to EPA an application for registration of metamitron as a fruit thinner in apple and pear. This new active ingredient application is currently under review at EPA. In support of the Specific Exemption, ADAMA has provided EPA with available product chemistry, toxicity, and residue data. ADAMA continues to investigate the data necessary to support a Section 3 registration and will engage in discussions with EPA during the time period outlined in 40 CFR 162.25(b)(2)(ii).

ADAMA US
8601 Six Forks Road, Building 1, Suite 300
Raleigh, NC 27615
USA
Telephone 866-406-6262
ADAMA.COM

Please contact me at karina.castro@adama.com or (919) 256-9322 if you have any questions.



Karina Castro
Federal and State Regulatory Manager
ADAMA

METAMITRON	GROUP	5	HERBICIDE

GOLTIX 700 SC

UNREGISTERED PRODUCT. FOR EMERGENCY EXEMPTION USE ONLY

This pesticide is ONLY approved for sale, distribution, and use under FIFRA Section 18, Emergency Exemptions, on sugarbeets for the control of glyphosate tolerant Palmer amaranth in Colorado, Idaho, Nebraska, Oregon, and Wyoming.

This product may only be used at or after planting, as a pre-emergence treatment.

ACTIVE INGREDIENT:	**%w/w**
Metamitron(1,2,4-Triazin-5(4H)-one, 4-amino-3-methyl-6-phenyl)*	58.3%
OTHER INGREDIENTS:	41.7%
Total	100.0%

*Contains 5.84 lbs. of metamitron (CAS No. 41394-05-2) per gallon.
Goltix 700 SC is a suspension concentrate (SC)

KEEP OUT OF REACH OF CHILDREN
WARNING / AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

Manufactured for:
Makhteshim Agan of North America, Inc. d/b/a ADAMA
8601 Six Forks Road, Suite 300
Raleigh, NC 27615
How can we help? 1-866-406-6262

Emergency Exemption Nos.: **EPA Est. No.** 37429-GA-1

Effective Dates: March 30 to May 31, 2025

Following the use period, unused product must be returned to the distributor or ADAMA, and all product must be returned to ADAMA by August 31, 2025.

NET CONTENTS: ____

FIRST AID

IF SWALLOWED:	- Call a poison control center or doctor immediately for treatment advice. - Have person sip a glass of water if able to swallow. - Do not induce vomiting unless told to do so by a poison control center or doctor. - Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	- Take off contaminated clothing. - Rinse skin immediately with plenty of water for 15-20 minutes. - Call a poison control center or doctor for treatment advice.
IF INHALED:	- Move person to fresh air. - If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. - Call a poison control center or doctor for treatment advice.
Note to Physician: No specific antidote. Treat symptomatically.	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-250-9291 for emergency medical treatment information.	

In case of spills, fire, leaks or accident call 1-800-535-5053

Optional Text for Label Booklet: [For additional precautionary, handling and use statements, see inside of this booklet.]

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING

May be fatal if swallowed. Harmful if absorbed through skin or inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeve shirt and long pants
- Socks
- Shoes
- Waterproof gloves or chemical-resistant gloves such as: Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitril Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Natural Rubber ≥ 14 mils, Polyethylene, Polyvinyl Chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils.

Mixers/Loaders must wear coveralls in addition to the above PPE.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS

When handlers use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if they become saturated and the pesticide contacts the body and if pesticide gets inside. Then bathe thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.
By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

USE RESTRICTIONS

Goltix 700 SC is only approved for use in the following states/counties:

State	Counties
Colorado	Adams, Boulder, Larimer, Logan, Morgan, Phillips, Sedgewick, Washington, Weld and Yuma
Idaho	
Nebraska	Banner, Box Butte, Chase, Cheyenne, Dawes, Deuel, Garden, Keith, Kimball, Morrill, Perkins, Scotts Bluff, Sheridan and Sioux
Oregon	Malheur
Wyoming	Big Horn, Fremont, Goshen, Laramie, Park, Platte, and Washakie

- **DO NOT** make more than one application of Goltix 700 SC per year. A single additional application can be made in the event of crop failure.
- **DO NOT** apply Goltix 700 SC through any type of irrigation system.
- **DO NOT** apply by aircraft.
- **DO NOT** apply this product when wind velocity exceeds 15 mph.

- **DO NOT** make ground applications during temperature inversions (need at least 3 mph wind).
- **DO NOT** use sugarbeet leaves for food or feed.
- **When spraying in the vicinity of aquatic areas such as lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, and estuaries:**
    - Apply only during alternate years in fields adjacent to aquatic areas.
    - **DO NOT** apply by ground within 100 feet of aquatic areas.
    - **DO NOT** cultivate within 10 feet of an aquatic area to allow growth of a vegetative filter strip.

AGRICULTURE USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box apply to uses of this product that are covered by the Worker Protection Standard.
Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of **12 hours**.
PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water), is:

- Long-sleeve shirt and long pants
- Socks
- Shoes
- Waterproof or chemical-resistant gloves.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

APPLICATION INSTRUCTIONS

Rate and Timing
Apply GOLTIX 700 SC herbicide, with ground application equipment, after planting and prior to crop emergence, as a single pre-emergent (PRE) application at 64 fl oz product/a (2.92 lb ai/a). Apply GOLTIX 700 SC with at least 10 gallons of water per acre.

Incorporate, after ground application, with a ¼ to ½ inch of irrigation or rainfall within 48 hours.

<u>For Fields with Furrow Irrigation:</u>

If no rain is in the forecast within 48 hours of target planting date, do the following on the same day (best) or within no more than 48 hours:

1. Apply GOLTIX 700 SC at 64 fl oz/a to the field, prior to planting sugarbeets.
2. Do a shallow tillage to incorporate GOLTIX 700 SC into the soil.
3. Plant sugarbeets.

Recommendations

- Prior to GOLTIX 700 SC application, it is recommended to kill all emerged vegetation in the field with tillage or a burndown herbicide application. If large weeds are present prior to Goltix 700 SC

application, it is recommended that tillage is used to eliminate large weeds prior to applying Goltix 700 SC so large dead weeds do not prevent Goltix 700 SC from reaching the soil during application.

- For best season-long weed control results, it is recommended that a group 15 herbicide is applied at 2 true leaves. Additional group 15 herbicides may be needed at 6-10 TL to maintain weed control.

Rotational Crop Restrictions
DO NOT plant rotational crops within 30 days of the last application of Goltix 700 SC.

Replanting Instructions
If the initial planting of sugarbeet fails to produce a uniform stand, sugarbeet may be replanted in fields treated with GOLTIX 700 SC alone. When tank mixing with a labeled product, refer to the replant instructions for that product. **DO NOT** replant treated fields with any crop at intervals inconsistent with the "***Rotational Crop Restrictions***" section of this label. Where a tank mix is used, refer to the product's labels for any additional replant instructions.

If sugarbeet is replanted in fields where GOLTIX 700 SC was previously applied, an additional application of GOLTIX 700 SC may be applied at 64 fl oz/a to the field, prior to emergence.

Tank Mix Instructions
GOLTIX 700 SC may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the same timing and method of application for the sugarbeet to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. GOLTIX 700 SC cannot be mixed with any product containing a label prohibition against such mixing. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Compatibility Testing
A jar test is recommended prior to tank mixing to ensure compatibility of GOLTIX 700 SC and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe for approximately 30 minutes. If mixture balls-up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not a compatible tank mix combination.

Cleaning Instructions
After using GOLTIX 700 SC, triple rinse the spray equipment and clean with a commercial tank cleaner before using equipment for new application. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE:

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL:

Open dumping is prohibited. Pesticide wastes are toxic. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

NONREFILLABLE CONTAINERS:

Rigid, Nonrefillable containers that are too large to shake (i.e. with capacities greater than 5 gallons or 50 pounds).

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities**.**

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS**, **DISCLAIMER OF WARRANTIES** and **LIMITATIONS OF LIABILITY**.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ADAMA. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ADAMA makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of ADAMA is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ADAMA disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at ADAMA's election, the replacement of product.

DRAFT – 30Aug24