Noxious Weed Control in Kansas

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Kansas
Department of Agriculture
Plant Protection and Weed Control

Noxious Weed Control

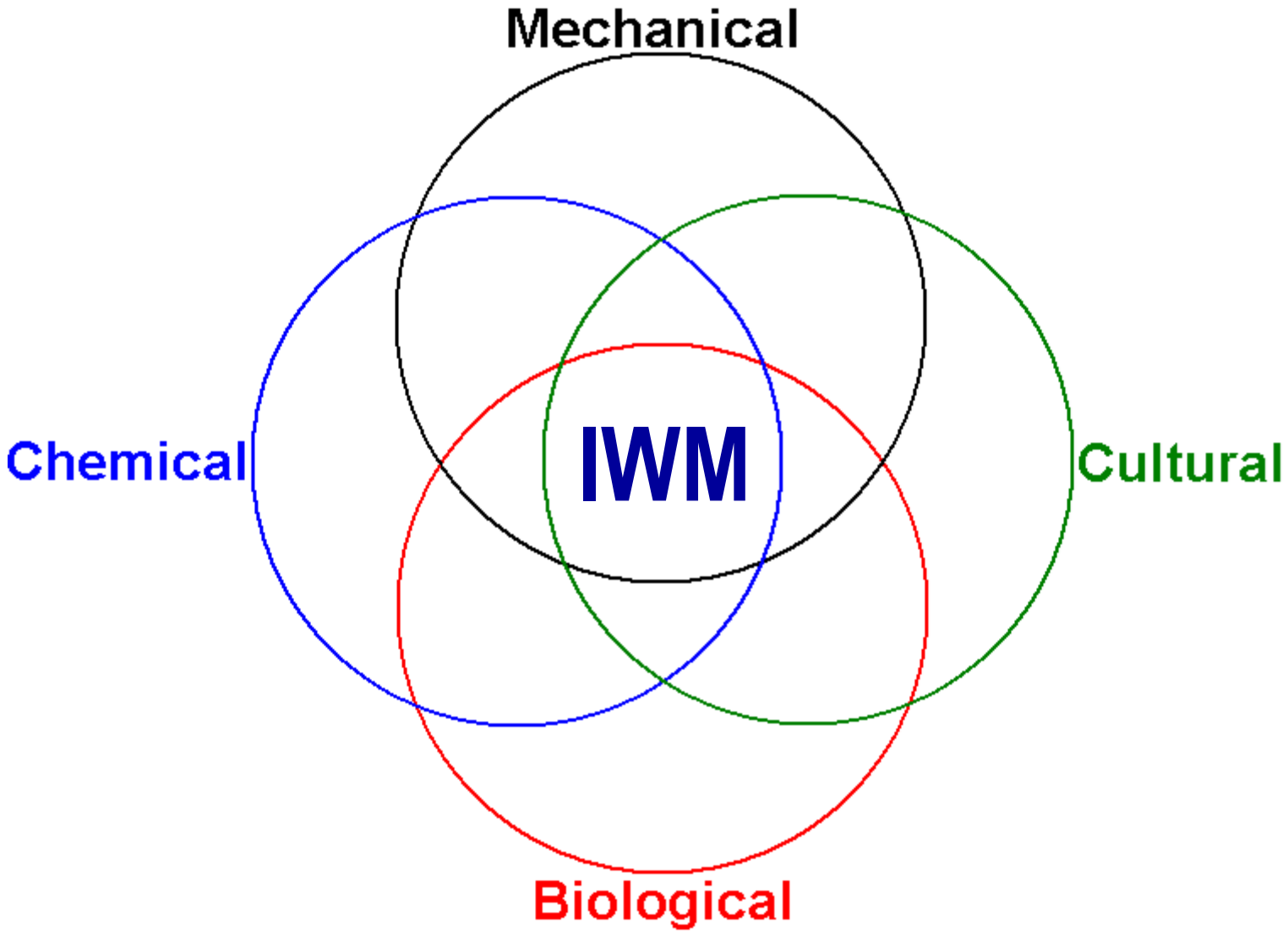
2-1314. Noxious weeds; control and eradication; listing.

It shall be the duty of persons, associations of persons, the secretary of transportation, the boards of county commissioners, the township boards, school boards, drainage boards, the governing body of incorporated cities, railroad companies and other transportation companies or corporations or their authorized agents and those supervising state-owned lands to control the spread of and to eradicate all weeds declared by legislative action to be noxious on all lands owned or supervised by them and to use such methods for that purpose and at such times as are approved and adopted by the Kansas department of agriculture.

Noxious Weed Control

- **2-1315**. Control of noxious weeds; control districts; duties of secretary; cooperation of secretary, county agents and county weed supervisors; rules and regulations.

  The secretary of agriculture is hereby empowered to decide and adopt methods as official for control and eradication of noxious weeds and to publish such methods, and to make and publish such rules and regulations as in the secretary's judgment are necessary to carry into effect the provisions of this act, and to alter or suspend such rules and regulations when necessary.



Integrated Weed Management

KANSAS DEPARTMENT OF AGRICULTURE
OFFICIAL
MUSK THISTLE CONTROL PROGRAM

DESCRIPTION

PREVENTION OF SPREAD OF MUSK THISTLE

MUSK THISTLE CONTROL PRACTICES

The control of musk thistle shall mean preventing the production of viable seed.

CULTURAL CONTROL

Mowing - Mow with a rotary mower before the first appearance of pink on the flowers. Mowing at full bloom will prevent seed production Mow cleanly and closely and repeat as needed for control.

Hand Cutting - Digging - Cut between the first appearance of pink and the first appearance of brown on the pappus of the earliest heads. Cutting 2 inches below ground level at any stage should kill the plant. **Pick heads that are beyond the bud stage and place in a tight container.**

HERBICIDES APPROVED FOR CONTROLLING MUSK THISTLE

2,4-D
Chlorsulfuron
Dicamba
Picloram
Metsulfuron methyl
Imazapic
Dicamba
Aminopyralid
Clopyralid

BIOLOGICAL CONTROL

Two insects for biological control of musk thistle are approved but must meet the requirements set forth in K.A.R. 4-8-41. Consult with your County Noxious Weed Director for more information.

Chemical Control

Noxious Weed Approved Cost Share Herbicide List

2,4-D* (4)
Aminopyralid (4)
Bromacil (5)
Chlorsulfuron (2)
Clopyralid (4)
Dicamba (4)
Diflufenzopyr (19)
Diquat (22)
Fenoxaprop (1)
Fluazifop (1)
Fluroxypyr (4)
Foramsulfuron (2)
Glyphosate (9)
Imazapic (2)
Imazapyr (2)
Metsulfuron methyl (2)
Nicosulfuron (2)
Picloram (RUP)** (4)
Primisulfuron (2)
Quinclorac (4)
Quizalofop-P (1)
Rimsulfuron (2)
Sethoxydim (1)
Sulfometuron (2)
Sulfosulfuron (2)
Tebuthiuron (7)
Triasulfuron (2)
Triclopyr (4)
Trifluralin (3)

*Amine, LV Ester or Choline formulations

**Restricted Use Product

Approved Cost Share Herbicides by Species

Field bindweed
2,4-D Amine or LV Ester
dicamba
dicamba + 2,4-D
diflufenzopyr + dicamba
glyphosate
glyphosate + 2,4-D
glyphosate + dicamba
glyphosate + diquat
imazapic
imazapic + glyphosate
imazapyr
picloram
picloram + 2,4-D
quiclorac

Sericea lespedeza
metsulfuron
triclopyr
triclopyr + fluroxypyr

Bur ragweed
2,4-D LV Ester
dicamba
dicamba + 2,4-D
glyphosate + dicamba
imazapic
picloram
picloram + 2,4-D

Russian knapweed
2,4-D LV Ester
dicamba
imazapic
imazapic + glyphosate
picloram

Musk thistle
2,4-D Amine or LV Ester (B)
aminopyralid
chlorsulfuron
clopyralid
clopyralid + 2,4-D
clopyralid + triclopyr
dicamba
dicamba + 2,4-D
diflufenzopyr + dicamba
diflufenzopyr + dicamba + 2,4-D
diflufenzopyr + dicamba + metsulfuron
diflufenzopyr + dicamba + picloram
imazapic
imazapic + glyphosate
metsulfuron methyl
metsulfuron methyl + 2,4-D
metsulfuron methyl + 2,4-D +dicamba
picloram
picloram + 2,4-D
triasulfuron + dicamba

Johnsongrass
fluazifop-P-butyl
fluazifop-P-butyl + fenoxaprop
foramsulfuron
glyphosate
imazapic
imazapic + glyphosate
nicosulfuron
nicosulfuron + rimsulfuron
primisulfuron
quizalofop
sethoxydim
sulfometuron
sulfosulfuron
trifluralin

Leafy spurge
2,4-D LV Ester
diflufenzopyr + dicamba + picloram
glyphosate
imazapic
imazapic + glyphosate
picloram
picloram + 2,4-D

Hoary cress
2,4-D LV Ester
dicamba
metsulfuron methyl
metsulfuron methyl + 2,4-D +dicamba

Pignut
picloram

Quackgrass
fluazifop-P-butyl
glyphosate
glyphosate + diquat
nicosulfuron
nicosulfuron + rimsulfuron
primisulfuron

Kudzu
dicamba
glyphosate
picloram
triclopyr

Canada thistle
2,4-D Amine or LV Ester
aminpyralid
chlorsulfuron
clopyralid
clopyralid + 2,4-D
clopyralid + triclopyr
dicamba
diflufenzopyr + dicamba + picloram
glyphosate
glyphosate + diquat
picloram

Multiflora rose - County option
2,4-D LV Ester
dicamba
glyphosate
picloram
imazapyr
tebuthiuron
triclopyr + 2,4-D
metsulfuron methyl
metsulfuron methyl + 2,4-D +dicamba

Bull thistle - County option
2,4-D Amine or LV Ester
aminopyralid
chlorsulfuron
clopyralid
clopyralid + 2,4-D
clopyralid + triclopyr
dicamba
dicamba + 2,4-D
diflufenzopyr + dicamba
diflufenzopyr + dicamba + 2,4-D
diflufenzopyr + dicamba + metsulfuron
diflufenzopyr + dicamba + picloram
imazapic
imazapic + glyphosate
metsulfuron methyl
metsulfuron methyl + 2,4-D
picloram
picloram + 2,4-D
triasulfuron + dicamba

Mode of Action

1. Lipid Biosynthesis Inhibitors
2. Amino Acid Biosynthesis Inhibitors
3. Cell Division Inhibitors
4. Synthetic Auxins
5.
6. Photosynthesis Inhibitors
7.
9. EPSP Synthase Inhibitor
14. Pigment Inhibitors
22. Membrane Disruptors

Range and Pasture Label

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planting
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lines, pip
openings

woody
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Specimen Label

RESTRICTED USE PESTICIDE
May Injure (Phytotoxic) Susceptible, Non-Target Plants. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification. Commercial certified applicators must also ensure that all persons involved in these activities are informed of the precautionary statements.

Specialty Herbicide

®Trademark of Dow AgroSciences LLC

For control of susceptible broadleaf weeds, woody plants and vines on rangeland and permanent grass pastures, fallow cropland, Conservation Reserve Program (CRP) acres, non-crop areas including forest planting sites, industrial manufacturing sites, rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, railroads, and wildlife openings in forest and non-crop areas

Active Ingredient:
picloram: 4-amino-3,5,6-trichloropicolinic acid, potassium salt 24.4%
Other Ingredients 75.6%
Total Ingredients 100.0%

Acid Equivalent
picloram: 4-amino-3,5,6-trichloropicolinic acid - 21.1% - 2 lb/gal

EPA Reg. No. 62719-6

Keep Out of Reach of Children
CAUTION

Precautionary Statements
Hazards to Humans and Domestic Animals

Causes Moderate Eye Irritation

Avoid contact with eyes or clothing. Prolonged or frequent repeated skin contact may cause allergic skin reactions in some individuals.

Personal Protective Equipment (PPE)
Applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof materials
- Shoes plus socks

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

Engineering Controls
When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the WPS (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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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.

First Aid
If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards
This pesticide is toxic to some plants at very low concentrations. Non-target plants may be adversely affected if pesticide is allowed to drift from areas of application. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not contaminate water used for irrigation or domestic purposes by cleaning of equipment or disposal of wastes. Do not allow run-off or spray to contaminate wells, irrigation ditches or any body of water used for irrigation or domestic purposes. Do not make application when circumstances favor movement from treatment site.

Picloram is a chemical which can travel (seep or leach) through soil and has the potential to contaminate groundwater which may be used for irrigation and drinking purposes. Users should especially avoid application of picloram where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow or to soils containing sinkholes over limestone bedrock severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Mechanical Control

Pulling Hoeing Digging

Burning Tilling Disking

Mechanical Control works best with annual or biennial plants.

Perennial plants store energy in their roots and will re-sprout or reproduce vegetatively.

Mechanical Control

<u>Biennials noxious weeds</u>
Musk thistle
Bull thistle

Control once and done
(for the season)

Control biweekly
(for 5+ years)

<u>Perennial noxious weeds</u>
Field bindweed
Sericea lespedeza
Johnsongrass
Bur ragweed
Canada thistle
Leafy spurge
Hoary cress
Pignut
Kudzu
Quackgrass
Russian knapweed
Multiflora rose

Cultural Control

- Crop Rotation
  - Resistant Varieties
- Intercropping
- Cover Crops
- No-till
- Revegetation
  - Disturbed Sites
- Weed Free Forage
  - Certified
- Cleaning Machinery

Prevention

Biological Control

KDA

19 Agents available for 6 noxious weeds

35 Agents available for 6 invasive weeds

Biological control agents do not kill the target species, they simply slow down the rate of spread and reproduction

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