Yellow Starthistle Control

I. Origin

II. Distribution

III. Impact

IV. Identification

V. Culture

VI. Control Program Design Factors

VII. Control Mechanisms

VIII. Strategic Planning for Control
Early Growth Stages

Cotyledon

Young Seedling

Rosette
Control Program
- Design Factors -

If your goal is:  you must:

Eradication
- eliminate all seed production
- deplete the seed reservoir
- prevent seed from outside from being introduced

Management
- reduce:
  • plant density
  • seed production
  • plant height
  • canopy size
- prevent YST patches from developing into solid stands

Containment
- delineate boundaries around the infested area
- eliminate peripheral patches and solitary plants outside the infested area

Prevention
- eliminate isolated plants
- use clean seed, hay, fill soil, & road building materials
- clean equipment & vehicles
- examine nursery stock & plantings

Take note of:
• relative abundance
• patterns of distribution, i.e. in the general area, in your area of concern
## Control Measures - Timing

<table>
<thead>
<tr>
<th>Control measures</th>
<th>Developmental stages of yellow starthistle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivation / seeding</td>
<td>Seedling</td>
</tr>
<tr>
<td></td>
<td>Rosette</td>
</tr>
<tr>
<td></td>
<td>Vegetative</td>
</tr>
<tr>
<td></td>
<td>Floral bud</td>
</tr>
<tr>
<td></td>
<td>Flower</td>
</tr>
<tr>
<td></td>
<td>Seed formation</td>
</tr>
<tr>
<td></td>
<td>Seed maturation</td>
</tr>
<tr>
<td></td>
<td>Seed dispersal</td>
</tr>
<tr>
<td></td>
<td>Senescence</td>
</tr>
</tbody>
</table>

## HERBICIDES FOR CONTROL

<table>
<thead>
<tr>
<th>NAME</th>
<th>NON-SELECTIVE</th>
<th>SELECTIVE</th>
<th>PRE/POST EMERGENT</th>
<th>SUITABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glyphosate (Roundup, &amp; many names)</td>
<td>X</td>
<td></td>
<td>Post</td>
<td>-not for large areas -non-crop areas</td>
</tr>
<tr>
<td>2,4-D (Weed-B-Gone)</td>
<td>X</td>
<td></td>
<td>Post</td>
<td>-non-crop areas -drift problems</td>
</tr>
<tr>
<td>Dicamba (Weed-Be-Gone &amp; others)</td>
<td>X</td>
<td></td>
<td>Post</td>
<td>-non-crop areas -drift problems</td>
</tr>
<tr>
<td>Trichlopyr (Ortho Poison Ivy &amp; Brush Killer)</td>
<td>X</td>
<td></td>
<td>Post</td>
<td>-non-crop areas -drift problems</td>
</tr>
<tr>
<td>Clopyralid (Transline)</td>
<td>X</td>
<td></td>
<td>Both</td>
<td>-no grazing restrictions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-non-crop areas -pesticide ID number required, contact county Ag Dept</td>
</tr>
<tr>
<td>Aminopyralid (Milestone)</td>
<td>X</td>
<td></td>
<td>Both</td>
<td>-same as Clopyralid</td>
</tr>
</tbody>
</table>

Source: William Frost (Natural Resource Advisor) & Joe DiTomaso (Extension Specialist) from Yellow Star Thistle Workshop
Yellow Starthistle Leading Edge Project

To follow along with the videos at the right, print off the Yellow Starthistle Biology, Mechanical and Cultural Control Methods presentation below.

- **Yellow Starthistle Biology, Mechanical and Cultural Control Methods**: by Wendy West, UC Cooperative Extension, El Dorado County January 23, 2010
- **Yellow Starthistle Control**: by Joe DiTomaso, Cooperative Extension Weed Specialist, University of California, Davis January 11, 2008
- **Yellow Starthistle Control Utilizing Herbicides**: by LeeAnne Mila, El Dorado County Department of Agriculture January 23, 2010
- **Yellow Starthistle Control in Vineyards & Orchards**: by Scott Oneto, UC Cooperative Extension Central Sierra January of 2010

Publications & Handouts

- Yellow Starthistle Pest Note
- Landowner Strategic Plan
- Milestone and Transline - How much should I use?
- How to get Transline or Milestone?
- Equipment Rentals - El Dorado County Department of Agriculture
- Starthistle Killer Brand Calibration Safety Notes
- Pesticides: Safe & Effective Use in the Home Landscape Pest Note
- Soil Solarization for Gardens & Landscapes Pest Note

Other Resources

- A Landowner's Guide to Preventing the Introduction and Spread of Invasive Weeds - *El Dorado County Invasive Weed Management Group*
- A Builder and Contractor's Guide to Preventing the Introduction and Spread of Invasive Weeds - *El Dorado County Invasive Weed Management Group*

Resource:
http://cecentralsierra.ucanr.edu/Invasive_Weed_Management_Program/Yellow_Starthistle_Leading_Edge_Project/Presentations