

Invasive thistles of Bay Area counties

| Species | Life habit | Reproduction | Mowing? |
|------------------------|----------------|---|--|
| Woolly distaff thistle | Annual weed | Germinates throughout winter, maybe into summer | Mow right before flowering |
| Stinkwort | | | |
| Purple starthistle | Perennial weed | Germinates with rainfall <i>and also</i> sprouts from the roots | Mow right before flowering – will have to repeat |
| Artichoke thistle | | | |

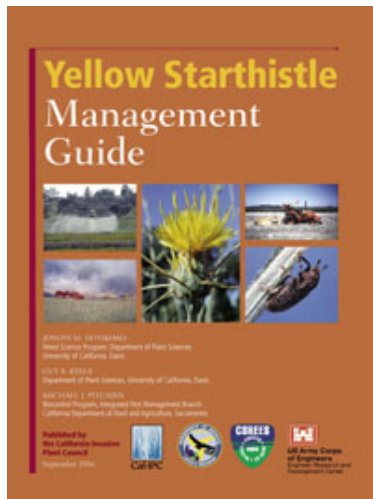
Other common purple-flowered thistles:
 Italian thistle ▪ Milk thistle ▪ Bull thistle

Herbicides for controlling thistles

| Product | Chemical | Rate per acre | Soil residual | Good for | Best timing |
|---|--------------------------|------------------------|---------------|---|---------------------------------------|
| Selective soil-residual chemicals for emerged plants and seedlings | | | | | |
| <i>Milestone</i> | aminopyralid | 3 to 7 oz | 3-6 months | Most thistles (not stinkwort) | Mid to late winter |
| <i>Transline</i> | clopyralid | 2/3 pint to 1 1/3 pint | 2-3 months | Annual thistles; also good for purple starthistle | Late winter to spring |
| Short or no residual; for emerged plants | | | | | |
| <i>Milestone VM+</i> | triclopyr + aminopyralid | 2 to 3 qts | 1-2 months | Most thistles | Spring |
| <i>Garlon</i> | triclopyr | up to 2 qts | None | Most broadleaf plants | Late spring to summer |
| <i>Roundup</i> and others | glyphosate | up to 2 qts | None | Almost anything green | Late spring to summer (NOT in winter) |

Integrated Management for Yellow Starthistle

Available Online: <http://www.cal-ipc.org/ip/management/yst.php>



Summer burning (before flowering) followed by winter application of *Milestone* or *Transline* is the best treatment for yellow starthistle. This hasn't been tested on the thistles discussed above.

Important Information Sites

wric.ucdavis.edu

- Training videos
- Herbicide susceptibility charts
- Weed Blog
- Weed identification tool
- Eventually, pages from the "Weed Control in Natural Areas" book

ipm.ucdavis.edu

- Pest control notes and fact sheets
- Weather data
- Free online training courses

cal-ipc.org

- Invasive plants information and impacts
- Maps of invasive plants
- Weed management areas
- Order "Weed Control in Natural Areas"

genericherbicides.com

- Inexpensive source for clopyralid, triclopyr, glyphosate, and surfactants