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Common Milkweed

This NebGuide discusses milkweed and how to control it in farmland.

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- Description and How It Spreads
- Cultural Control
- Crop Rotation and Tillage
- Chemical Control

Common milkweed (*Asclepias syriaca* L.) is a perennial, broadleaf weed native to North America (*Figure 1*). It is most common in eastern and central Nebraska, but is occasionally found farther west in moist sites.

*Figure 1. Common milkweed.* (Photo used with permission from M. Williams. 63K JPG.)

There are several reasons common milkweed is on the increase in Nebraska. Less tillage is used in crop production today than in the past, creating more favorable conditions for plant establishment and growth. Herbicides are widely used today which often do not harm common milkweed but control most annual weeds that would otherwise compete with it. Cultivated land in eastern Nebraska is in row crops most of the time, which provides a favorable environment for common milkweed. Irrigation and fertilizer use are practices that enhance common milkweed as well as crop growth.

**Description and How It Spreads**

Like other members of the milkweed family, common milkweed contains a white, milky sap in all plant parts. Leaves are deep green and broad, and the stem unbranched. Common milkweed reproduces by seed and also from buds on its root system (*Figure 2*). The root system is extensive and in established stands common milkweed roots have been found to a depth of 12 1/2 feet in Nebraska soils.

*Figure 2. Buds on the root system of common milkweed.* (47K JPG)
Small pinkish-purple flowers are produced in clusters at the top of the unbranched stem. Flowering occurs in June and July. Seeds are borne in pods and are attached to a silky fiber. When the pods open in September and October seeds are readily carried by the wind. Seeds float, so runoff and irrigation water spread the seed. The seed can survive three years of burial in the soil. New plants readily become established from seed in areas free of other plant competition. Common milkweed becomes a perennial (capable of reproducing from its root system) approximately three weeks after seedling emergence.

**Figure 3. Common milkweed in flower.** (Photo used with permission from M. Williams. 64K JPG.)

New shoots developing from established roots begin emerging in late April and grow more rapidly than spring-seeded crops. Because common milkweed emerges in April and May and develops rapidly, it competes strongly with sorghum, soybeans and dryland corn. While preemergence herbicides have little effect on shoots coming from the root system, some preemergence herbicides, including AAtrax, atrazine, Sencor, and Lexone, will control common milkweed seedlings. Postemergence treatments of 2,4-D, AAtrax, and atrazine have not given satisfactory control of seedlings or shoots coming from the root system.

Common milkweed can reduce crop yields. Studies in Nebraska show yield reductions of 0 to 30% in dryland sorghum in areas infested with common milkweed.

Under present row crop production methods common milkweed is spreading and infestations are becoming more severe. Surveys indicate common milkweed has increased markedly in row crops during a four-year study in eastern and south central Nebraska (*Table I*). Tillage implements cut and drag root sections of the plant, which spreads it. Reduced tillage systems provide favorable conditions for the development, growth and spread of this plant. Use of irrigation water and fertilizer also creates a favorable environment for common milkweed.

### Table I. Occurrence and spread of common milkweed in Nebraska from 1969 to 1976.

<table>
<thead>
<tr>
<th>Percent of fields infested</th>
<th>Northeast</th>
<th>Southeast</th>
<th>South Central</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>5</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>Sorghum</td>
<td>35</td>
<td>74</td>
<td>67</td>
</tr>
<tr>
<td>Soybeans</td>
<td>51</td>
<td>80</td>
<td>14</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>9</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Wheat</td>
<td>12</td>
<td>42</td>
<td>18</td>
</tr>
<tr>
<td>Roadsides</td>
<td>42</td>
<td>46</td>
<td>44</td>
</tr>
</tbody>
</table>

^aDifficulty of seeing common milkweed in corn may contribute to lower numbers than other row crops.

^bSmall number of fields surveyed making this figure less reliable.

### Cultural Control

Prevention of seedling establishment is an important part of controlling common milkweed. Till idle land at intervals during the growing season to prevent plants from becoming established. A single tillage operation will kill common milkweed seedlings if done before the plants are three weeks old. Control common
milkweed in non-crop areas with herbicides or tillage to eliminate sources of infestation.

**Crop Rotation and Tillage**

Inclusion of winter wheat in a crop rotation aids in controlling common milkweed. Winter wheat grows rapidly in the fall and early spring, gaining an advantage on common milkweed which is inactive at this time. Tillage at 3- to 4-week intervals the summer after wheat harvest in July and before wheat seeding in September further weakens the plant. A single winter wheat crop will not eliminate common milkweed, but the stand will be reduced. Winter wheat four to five years in a row with intensive tillage will eliminate common milkweed.

Alfalfa cut three times a year for three years will virtually eliminate stands of common milkweed. Alfalfa competes strongly and the frequent cuttings deplete the weeds’ root system. After the 3-year period much of the original common milkweed seed in the soil would also be dead.

**Chemical Control**

*Non-Cropland* -- Established stands of common milkweed can be controlled with herbicides. On non-cropland (i.e., roadsides, railroad rights-of-way, etc., but not idle land or grazing land), Amitrol-T, Roundup or Tordon would provide control (*Table II*).

*Cropland* -- Common milkweed can be controlled in cropland with Roundup prior to planting sorghum, soybeans, and wheat. Treatments made from flower bud through flowering growth stages (approximately the month of June) give the best results. Leave common milkweed undisturbed by tillage in the spring prior to treatment and for seven days after treatment. This requirement delays planting spring-seeded crops until after the first week of June. Roundup can be used to control common milkweed in stubble after small grain harvest, provided the milkweed is allowed to regrow undisturbed after harvest. Banvel + 2,4-D (avoid use between June 20 and September 1 when soybeans are nearby) can also be used in small grain stubble after harvest under the same conditions, but is less effective than Roundup and requires retreatment the following year.

Other methods of using Roundup and other herbicides in crops during the growing season are being studied but have not been cleared for use.

Roundup applied in a wiper applicator can be used to suppress common milkweed in soybeans. Herbicide coverage of the common milkweed is incomplete with this method, resulting in reduced effectiveness compared to a sprayer. Used over several years, however, common milkweed populations can be reduced with Roundup applied in a wiper applicator.

**Table II. Herbicides for common milkweed control.**

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Apply this amount commercial producta</th>
<th>Application time</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amino Triazole or Amitrol-T</td>
<td>4.4 lb/A or 2 gal/A</td>
<td>Bud to bloom stage</td>
<td>Use Amino Triazole, Amitrol-T and Tordon only on non-cropland.</td>
</tr>
<tr>
<td>2, 4-Db + Banvel</td>
<td>1 qt/A + 1/2 pt/A</td>
<td>Flower bud through flowering</td>
<td>Use the 2, 4-D + Banvel only when no crop is present. Avoid tillage for 7 days after application.</td>
</tr>
<tr>
<td>Roundup</td>
<td>3 qt/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tordon 212 2 qt/A  Bud to bloom stage

For spot treatment applied with a hand sprayer, mix the following amounts of herbicide per gallon of water: Amitrol-T—9 tablespoons; 2,4-D + Banvel—1 tablespoon + 1 teaspoon; Roundup—3 tablespoons; Tordon 212—2 tablespoons.

Retreatment will be required in following years.