Dollarweed

Dollarweed (*Hydrocotyle* spp.), also known as pennywort, is a warm-season perennial weed. It gets the common name, dollarweed, from its silver-dollar-shaped leaves. The leaves of dollarweed are round, bright green, fleshy and look like miniature lily pads measuring 1-2” in diameter with a scalloped edge. It has a low-growing habit that spreads by seeds, rhizomes and tubers.

Dollarweed is often confused with dichondra. One way to distinguish the two is by looking at the placement of the leaf stem. Dollarweed has a stem located in the center of the leaf while dichondra’s stem is located at the edge (see image below).

![Dollarweed leaf on left and dichondra leaf on right.](image)

Bert McCarty, Clemson University

Before starting a weed control program homeowners should realize that complete eradication of dollarweed (or any weed) from the landscape is not practical. A more practical approach is to control (not eradicate) the weed by limiting the infestation to a tolerable level.

**Cultural Control**

Dollarweed is a water-loving plant that can float. The presence of dollarweed indicates that there is excessive moisture in the area. Research at the University of Florida demonstrated a reduction in dollarweed just by reducing irrigation frequency (http://grove.ufl.edu/~turf/weeds/dollarweed.html). Monitoring moisture levels and evaluating irrigation frequency are the first steps to controlling dollarweed. Landscape plants and lawns require one-inch of water a week for optimum growth.

A properly maintained landscape that is not stressed by insects, diseases, drought or nutrient imbalance is the best defense against weeds. Proper mowing height of lawns and a 3-inch thick mulch layer around trees and shrubs will prevent the invasion of weeds. For more information on proper landscape maintenance techniques, see the following fact sheets: HGIC 1056, *Watering Trees & Shrubs*; HGIC 1604, *Mulch*; HGIC 1201, *Fertilizing Lawns*; HGIC 1205, *Mowing Lawns* and HGIC 1207, *Watering Lawns*.

**Chemical Control**

**Lawns:** Dollarweed thrives in weak, thin turf with excessive moisture. The first defense against dollarweed is to reduce moisture levels and modify cultural methods (i.e., proper mowing height and irrigation). After taking steps to modify the lawn care techniques, a chemical control may still be necessary to further reduce the dollarweed population. Herbicides should be chosen according to turf species and applied in late spring (after full spring green-up of the lawn) when weeds are small. Herbicide effectiveness is reduced as weeds mature.

Atrazine can be applied to St. Augustinegrass and centipedegrass up to two times a year. For maximum effect atrazine should be applied once in the fall and again in late spring (after spring green-up). Atrazine has a pre- and post-emergent effect on weeds, which means it helps to control both
emerged weeds and weed seed. It should NOT be applied to newly seeded lawns due to the detrimental effect it has on seed germination. Delay atrazine applications to newly sodded and sprigged lawns until it is well-established and actively growing. Examples of products containing atrazine in homeowner sizes are:

- Hi-Yield Atrazine Weed Killer
- Southern Ag Atrazine St Augustine Weed Killer
- Image for St. Augustinegrass & Centipedegrass with Atrazine

**CAUTION:** Herbicides containing 2,4-D should be applied at a reduced rate on St. Augustinegrass and centipedegrass to prevent damage to these lawns. The product label will give the rate to use for each type of turfgrass. If a second application is needed, apply the herbicide in spot treatments. Repeated applications of a three-way herbicide should be spaced according to label directions. Three-way herbicides should not be applied during spring transition (green-up of lawn) or when air temperatures exceed 90 °F. A newly seeded lawn should be mowed a minimum of three times before applying an herbicide.

Imazaquin (such as in Image Herbicide Consumer Concentrate – Kills Nutsedge) can be applied safely to bermudagrass, St. Augustinegrass, centipedegrass and zoysiagrass, but do not apply to tall fescue. Apply imazaquin in the spring (after spring green-up) when weeds are small. A second application can be made in six weeks after the initial application. Do not apply to newly planted, plugged or sodded turfgrass.

Both atrazine and imazaquin can travel through soil and enter ground water, please read the label for all environmental precautions. Users are advised not to apply atrazine or imazaquin to sand or loamy sand soils where the water table (groundwater) is close to the surface and where these soils are very permeable, i.e., well-drained.

The herbicide mix of thiencarbazone, iodosulfuron, and dicamba, as found in Celsius WG Herbicide, is selective to control many broadleaf weeds and several grass weeds in all four of the common warm-season grasses. It cannot be used in fescue lawns, but can be used to remove fescue from warm-season lawns. Apply when dollarweed is actively growing and again 2 to 4 weeks later. The addition of a non-ionic surfactant, such as Southern Ag Surfactant for Herbicides, will increase control (see Table 1).

Once dollarweed has been eliminated in areas of the turf, bare spots will be left behind. To prevent the invasion of new weeds in these bare spots fill them with plugs or sprigs of the desired turfgrass.
Table 1. Turf Tolerance to Herbicides for Dollarweed Control.

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Bermudagrass</th>
<th>Centipedegrass</th>
<th>St. Augustinegrass</th>
<th>Tall Fescue</th>
<th>Zoysiagrass</th>
</tr>
</thead>
<tbody>
<tr>
<td>atrazine</td>
<td>D</td>
<td>S</td>
<td>S</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>(3-way) 2,4-D + MCPP + dicamba</td>
<td>S</td>
<td>I</td>
<td>I</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>imazaquin</td>
<td>S-I</td>
<td>S</td>
<td>S</td>
<td>NR</td>
<td>S</td>
</tr>
<tr>
<td>thiencarbazone, iodosulfuron, &amp; dicamba¹</td>
<td>S</td>
<td>S</td>
<td>S²</td>
<td>NR</td>
<td>S</td>
</tr>
</tbody>
</table>

S=Safe at labeled rates  
I= Intermediate safety, use at reduced rates  
NR= Not registered for use on and/or damages this turfgrass  
D = Fully dormant turf only.  

Note: Do not apply postemergence herbicides, except Celsius WG Herbicide, to lawns during the spring green up of turfgrass.  
¹This mix of active ingredients requires the addition of 2 teaspoons of a non-ionic surfactant (that is, a wetter-sticker agent to aid in weed control at 0.25% by volume) per gallon of water, such as Hi-Yield Spreader Sticker.  
²Spot treatments to St. Augustinegrass at temperatures above 90 degrees may cause temporary growth regulation.

Landscape Beds: In landscape beds dollarweed can be hand dug or controlled with an herbicide. Dollarweed is a perennial weed that can emerge from seeds, tubers and rhizomes. Once dollarweed has made its way into the landscape bed, an herbicide may be necessary if hand pulling is not practical.

Glyphosate can be used for spot treatments around ornamental plants. Glyphosate is a non-selective herbicide that should be used with caution. Do not allow glyphosate spray mist to contact ornamental foliage or stems as severe injury will occur. A cardboard shield may be used to prevent glyphosate spray from drifting to nearby ornamentals. Examples of products containing glyphosate in homeowner sizes are:

- Roundup Original Concentrate,
- Roundup Pro Herbicide,
- Martin’s Eraser Systemic Weed & Grass Killer,
- Quick Kill Grass & Weed Killer,
- Bonide Kleenup Weed & Grass Killer 41% Super Concentrate,
- Hi-Yield Super Concentrate,
- Maxide Super Concentrate 41% Weed & Grass Killer,
- Super Concentrate Killzall Weed & Grass Killer,
- Tiger Brand Quick Kill Concentrate,
- Ultra Kill Weed & Grass Killer Concentrate,
- Gordon’s Groundwork Concentrate 50% Super Weed & Grass Killer,
- Zep Enforcer Weed Defeat III,
- Eliminator Weed & Grass Killer Super Concentrate,
- Monterey Remuda Full Strength 41% Glyphosate,
- Knock Out Weed & Grass Killer Super Concentrate,
- Southern States Grass & Weed Killer Concentrate II,
- Total Kill Pro Weed & Grass Killer Herbicide,
- Ace Concentrate Weed & Grass Killer.

Imazaquin (Image Herbicide Consumer Concentrate –Kills Nutsedge) is a selective herbicide that can be applied safely around certain landscape plants; see product label for a listing of the plant materials. Imazaquin should not be applied around the root zones of plants not on the product label. It is best to apply imazaquin when weeds are small (early spring). A second application can be applied six weeks later if necessary.

Glyphosate and imazaquin are both more effective when weeds are actively growing and should not be applied under drought conditions. As with all pesticides, read and follow all label instructions and precautions.
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