Dollarweed (Pennywort)

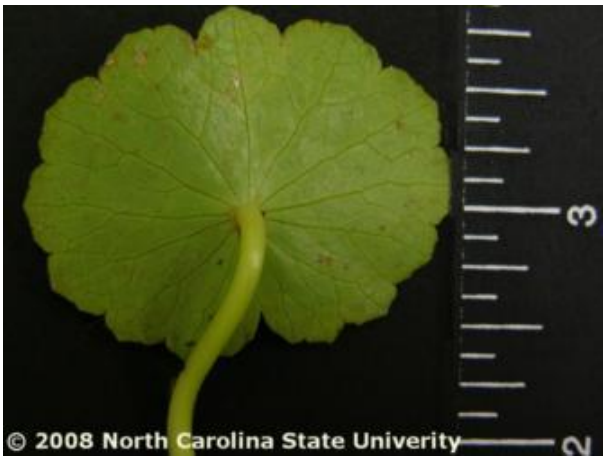
[*Hydrocotyle spp.*]

DESCRIPTION

This perennial weed is commonly found in very wet areas. Dollarweed can float in water. Plants reproduce from rhizomes, and have leaves that are on long stalks. Solid scalloped leaves are attached to the stalk on the underside and form an inverted "umbrella" shape. Clusters of white flowers form in late summer.

Characteristic	Description
Growth Season	perennial weed
Growth Habit	prostrate, spreading; leaves on erect long petioles
Leaflet Number	one
Leaf Margin	serrated/toothed; scalloped
Leaf Hairs	none
Leaf/Leaflet Shape	round
Leaf Width	1 inch to greater than 2 inches
Leaf Venation	palmate; petiole attaches to center of leaf and veins arise from this point
Leaf Arrangement	alternate
Root Type	fibrous
Flower Color	white

dollarweed (pennywort) leaf-top



dollarweed (pennywort) leaf venation (bottom)

Note: Still not sure this is the right weed? The Turf & Weed Identification Decision Aid may help. Check the TurfFiles glossary for definitions of unfamiliar terms.

CULTURAL CONTROL

Perennial broadleaf turf weeds are capable of living more than two years. They thrive in weak, thin turf; golf fairways and roughs; home lawns; playfields; and industrial grounds. Proper turf maintenance is the key to control of this weed. First, select adapted turfgrass cultivars for your area and then properly fertilize, mow, and water to encourage dense growth.

CHEMICAL CONTROL

Dollarweed is a difficult weed to control for an entire growing season. Repeat spring applications of trifloxysulfuron (Monument), metsulfuron (Manor, Blade, etc.), or imazaquin (Image) in tolerant turf, as well as two, three, and four way broadleaf herbicides offer postemergence control.

Preemergence herbicides:

Herbicide	Tolerant Turfs [1]	Average Efficacy Rating[2]	Range of Trial Efficacy Values, %	Number of Trials	Products [3]
atrazine*	be, c, sa, z	E		0	AAtrex 4L

Postemergence herbicides:

Herbicide	Tolerant Turfs [1]	Average Efficacy Rating[2]	Range of Trial Efficacy Values, %	Number of Trials	Products [3]
trifloxysulfuron-sodium	be, z	E	74 - 100	10	Monument
dicamba & MCPA & triclopyr	ba, bc, be, bk, f, r, z	E	98	1	Cool Power, Horsepower
dicamba	ba, be, bk, f, r, z	E		0	Banvel, Clarity, Vanquish
glyphosate		E		0	Glyphosate Original, Roundup, Touchdown Pro**
2,4-D & dicamba & mecoprop	bk, f, r, z	G	76 - 97	5	MEC Amine-D*, Trimec Bentgrass, Trimec Classic, Trimec Southern, Triplet
metsulfuron	be, sa, z	G	69 - 95	5	Escort**, Manor
2,4-D & carfentrazone & dicamba & mecoprop	ba, bc, be, bk, f, r, z	G	83 - 91	2	Speed Zone, Speed Zone Southern
2,4-D & clopyralid & dicamba**	ba, bc, be, bk, f, r, z	G	78 - 96	2	Millenium Ultra 2
2,4-D	be, bk, f, r, z	G		0	2,4-D amine, Solution Water Soluble
clopyralid & triclopyr**	be, bk, c, f, r, z	F	31 - 93	5	Confront

* For use only by or under the supervision of a certified applicator, or by commercial nursery, turf, and landscape personnel.

** Not for application to residential lawns.

Footnotes:

(1) ***Turfgrass Codes:***

ba	bahiagrass
bc	bentgrass, creeping
be	bermudagrass
bk	bluegrass, Kentucky
c	centipedegrass
f	fescue, tall
r	ryegrass, perennial
sa	St. Augustinegrass
z	zoysiagrass
blank	No turfgrass in the database is completely tolerant. Check label to see if chemical can be used at a reduced rate or during the dormant season on your turfgrass.

(2) ***Efficacy Ratings:***

E	excellent control (90 to 100%)
G	good control (80 to 90%)
F	fair control (70 to 80%)

Efficacy ratings are based on herbicide trials performed by weed scientists at North Carolina State University between 1997 and 2007. The number of trials included in the efficacy ratings is displayed in the next-to-last column. The higher this number, the more confidence can be placed in the efficacy values. Trials may have involved sequential applications of one or more chemical. Details of individual trials (herbicide rates, dates of application, environmental conditions at time of application, etc) can be viewed on the TurfFiles web site, through the Turf Weed Management Decision Aid.

Efficacy ratings for chemicals lacking trial data are from "Pest Management Strategic Plan for Turfgrass in the Southern United States," a summary of a workshop for turf experts from multiple universities held in Griffin, GA in October, 2004. The workshop was sponsored by the Southern Region Integrated Pest Management Center.

(3) Recommendations of specific chemicals are based upon information on the manufacturer's label and performance in a limited number of trials. Because environmental conditions and methods of application may vary widely, performance of the chemical will not always conform to the safety and pest control standards indicated by experimental data. The order in which brand names are given is not an indication of a recommendation or criticism.

Recommendations for the use of agricultural chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services does not imply endorsement by North Carolina State University or discrimination against similar products or services not mentioned. Other brand names may be labeled for use on turfgrasses. Individuals who use agricultural chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact your county's Cooperative Extension agent.

Links contained in this document:

Glossary: http://www.turffiles.ncsu.edu/Glossary.aspx

Pest Management Strategic Plan: http://www.ipmcenters.org/pmsp/pdf/SouthernTurfgrass.pdf

Turf & Weed Identification Decision Aid: http://www.turffiles.ncsu.edu/turfid/

Turf Weed Management Decision Aid: http://www.turffiles.ncsu.edu/turfweedmgmt/