Henbit

Description

Henbit (*Lamium amplexicaule*) is a sparsely hairy winter annual with greenish to purplish, tender, square stems. Its opposite leaves are broadly egg shaped with bluntly toothed margins and prominent veins on the underside. Upper leaves are sessile (directly attached to the stem) and lower leaves have petioles. It has a fibrous root system and can grow to a height of 16 inches. Henbit’s distinctive flowers are reddish purple in color with darker coloring in spots on lower petals. It flowers in the spring with the flowers arranged in whorls in the upper leaves.

Henbit is found throughout most of South Carolina. It most commonly occurs in open disturbed sites, often in fields and along roadsides. It is also found in home lawns.

Henbit is commonly confused with purple deadnettle (*Lamium purpureum*). However, purple deadnettle has upper leaves that are triangular, occur on petioles, and are distinctly red or purple-tinted, unlike the upper leaves of henbit.
Cultural Control
Henbit is a winter annual, broadleaf weed that reproduces by seed that germinate in the fall or winter. Henbit grows during any period of warm weather that occurs in winter. Other than unusual warm weather periods, it remains somewhat dormant during the winter. Henbit resumes growth and produces seed in the spring and dies as temperatures increase in late spring and early summer.

Henbit can quickly invade thin turf areas especially where there is good soil moisture. Shade also encourages growth. Many have a prostrate growth habit and are not affected by mowing.

A dense, vigorous turf is the best way to reduce the encroachment of henbit. First, select a turfgrass cultivar adapted for your area, and then properly fertilize, mow, and water to encourage dense growth. For more information on growing healthy turfgrass, see HGIC 1201, Fertilizing Lawns; HGIC 1205, Mowing Lawns; and HGIC 1207, Watering Lawns.

In landscape beds, henbit can be hand dug and suppressed with the use of mulch. A 3-inch mulch layer is ideal to reduce weed growth.

Chemical Control
In Lawns: Cultural controls should be implemented before applying herbicides for henbit control. However, after taking steps to modify lawn care techniques, a chemical control may still be necessary to further reduce a henbit population. Herbicides should be carefully chosen according to turf species and all label instructions followed. Chemical controls for henbit should be applied in fall or early spring for best results. Keep in mind that herbicide effectiveness is reduced as weeds mature.

A three-way herbicide may be used on bermudagrass, zoysiagrass, centipedegrass, St. Augustinegrass and tall fescue to control henbit, deadnettle or almost any broadleaf weed in the lawn. The active ingredients of a three-way herbicide include the following broadleaf weed killers: 2,4-D, dicamba, and mecoprop (MCPP). Examples of three-way herbicides for residential lawns in homeowner sizes are:

- Ferti-lome Weed-Out Lawn Weed Killer - Contains Trimec®
- Southern Ag Lawn Weed Killer with Trimec®
- Bayer Advanced Southern Weed Killer for Lawns
- Spectracide Weed Stop Weed Killer for Lawns
- Bonide Weed Killer – lawn Weed Killer Concentrate
- Ortho Weed B Gon Weed Killer for Lawns

Note: 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 labels 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.

In addition to three-way herbicides there are several other herbicides that can be used for henbit control on home lawns. Atrazine may be used to control henbit in centipedegrass and St. Augustinegrass. Examples of products containing atrazine for residential lawns in homeowner sizes are:

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

Metsulfuron (such as in Martin’s TopShot Weed Killer for Lawns can be used for henbit control in bermudagrass, centipedegrass, St. Augustinegrass, and zoysiagrass. Manor and Blade are also products that contain metsulfuron, but are packaged for landscape professionals. For these latter two professional products, a non-ionic surfactant (such as Southern Ag Surfactant for Herbicides) is required at 2 teaspoons per gallon of spray mix for best control.

Do not apply metsulfuron to lawn if over-seeded with annual ryegrass or over-seed for 8 weeks after application. Do not plant woody ornamentals in treated areas for one year after application of metsulfuron. Do not apply metsulfuron herbicides within two times the width of the drip line of desirable hardwood trees.

Note: Read and follow all label instructions when using herbicides. Repeat applications 10 to 14 days apart may be required for acceptable control. Do not
mow within 48 hours after application of most herbicides. Most postemergence herbicides need to dry on the leaf surface before irrigation or rainfall occurs.

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 henbit is actively growing and again 2 to 4 weeks later if needed. The addition of a non-ionic surfactant, such as Southern Ag Surfactant for Herbicides, will increase control (see Table 1).

CAUTION: Herbicides should not be applied during spring transition (green-up of lawn) or when air temperatures exceed 90 °F as this can cause severe damage to the turfgrass. A newly seeded lawn should be mowed a minimum of three times before applying an herbicide.

In Landscapes: If henbit is a problem in landscape beds, 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 glyphosate products 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.

Table 1. Turf Tolerance to Herbicides for Henbit Control.

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Bermuda</th>
<th>Centipede</th>
<th>St. Augustine</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>metsulfuron</td>
<td>S</td>
<td>S</td>
<td>S-I</td>
<td>NR</td>
<td>S</td>
</tr>
<tr>
<td>thiencarbazone, iodosulfuron, &amp; dicamba</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.

1 This 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.
2 Spot treatments to St. Augustinegrass at temperatures above 90 degrees may cause temporary growth regulation.
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