

Hophornbeam Copperleaf Management in Soybeans



Even if you apply herbicide at all the right times, hophornbeam copperleaf might still flourish in your fields. This summer annual emerges after most farmers make their postemergence herbicide applications.

Hophornbeam Copperleaf Distribution and Biology

- Hophornbeam copperleaf is native to the United States and is mostly found in the Midwest, Mid-South and South.
- Emergence begins in late May or early June and can continue for most of the growing season, with additional emergence after rain.
- Hophornbeam copperleaf plants, which can grow up to 40 inches, produce more than 12,000 seeds per plant when growing without competition, but that number drops drastically to 980 seeds per plant when grown with soybeans.
- This weed's first leaves are rounded and covered with short hairs, and true leaves are simple with finely-serrated margins, alternately arranged on the stem, somewhat heart-shaped at the base and covered with short hairs.
- Causes for an increase in this weed could be reduced use of soil-residual herbicides, reduced tillage, and the plant's ability to emerge following applications of non-residual, foliar-applied herbicides.
- Since hophornbeam copperleaf tends to emerge days or weeks after soybeans emerge, it is less likely to affect yield. Use of effective soil-residual herbicides with properly timed foliar-applied herbicides can further reduce any effect on yield.

Herbicide Resistance in Hophornbeam Copperleaf

Although there are no confirmed cases of herbicide resistance in hophornbeam copperleaf, it is important to follow best management practices to help prevent future resistance.

Herbicides for Control of Hophornbeam Copperleaf

- Soil-Applied
 - In general, dinitroaniline herbicides Treflan® (trifluralin) and Prowl® (pendimethalin) do not control hophornbeam copperleaf. Control with ALS-inhibiting herbicides varies.
 - Field research has demonstrated that products containing Authority (sulfentrazone), FirstRate (cloransulam), TriCor (metribuzin) or Valor (flumioxazin) can provide good control of hophornbeam copperleaf for 4 to 6 weeks after application.
- Foliar-Applied
 - Good to excellent postemergence control of hophornbeam copperleaf can be achieved with glyphosate, Liberty (glufosinate), Cobra (lactofen) or Flexstar (fomesafen). Control with Ultra Blazer® (acifluorfen) and most ALS-inhibiting herbicides has been less consistent.
 - Soybean injury and loss of leaves following applications of certain foliar-applied herbicides, coupled with precipitation and the later emergence pattern of hophornbeam copperleaf, could allow additional hophornbeam copperleaf emergence and growth to occur.
 - Preharvest control of hophornbeam copperleaf with glyphosate has been more consistent than with Gramoxone SL (paraquat).

Table 1. Herbicides for good control of hophornbeam copperleaf.

Herbicide	Group #
FirstRate®	2
TriCor®	5
Glyphosate	9
Liberty®	10
Authority®	14
Valor®	14
Cobra®	14
Flexstar®	14
Gramoxone® SL	22



Photo Credit: Aaron Hager, University of Illinois

Prickly sida (left) and hophornbeam copperleaf (right) look similar during early vegetative stages. Keep in mind that the leaf margins of prickly sida are more coarsely serrated than those of hophornbeam copperleaf. Hophornbeam copperleaf also lacks the prominent spine in the leaf axils that is found on prickly sida.

For more information and links to additional resources, visit www.IWillTakeAction.com.

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