



# MISSISSIPPI FORESTRY COMMISSION

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## Cogongrass Information for Mississippi Landowners

The purpose of this document is to reinforce many of the known issues in treating cogongrass and to give Mississippi landowners more information on what they can do to help treat and reduce the impact of cogongrass on their properties.

### One Herbicide Treatment is Not Enough

- It usually takes 2 - 3 years of treatments to fully eradicate cogongrass.
- The above ground leaves are only part of the problem. The below ground root system will require several treatments.
- An integrated approach using both chemical and mechanical treatments (disking, tilling or fire) still takes several years, but can successfully eradicate cogongrass.
- [Information on Cogongrass](#) Mississippi Forestry Commission
- [Cogongrass Management FAQ](#) Alabama Cooperative Extension

### Herbicides Used to Treat Cogongrass

- The main two chemicals for use in treating cogongrass are *Glyphosate* and *Imazapyr*
  - *Glyphosate* is not as long lasting but is safer to use around desirable trees due to it being foliar active only (needs to touch a leaf to work).
    - Will work for cogongrass control in hardwood stands, do not apply to leaves of other hardwoods you do not want impacted.
  - *Imazapyr* is both soil and foliar active and should not be used near hardwoods a landowner does not want to kill.
- Always read and follow chemical labels. Accidental spilling or overspray (particularly with Imazapyr) can harm a site for a long period of time.

### Tilling is a Useful Tool in Eradication

- Tilling or disking will break up the rhizomes in the soil.
- Constant soil disturbance (every few weeks during active growing season at minimum) will eventually deplete all resources in the root systems of cogongrass.
- Care must be taken not to spread these rhizomes and equipment should always be cleaned off before transporting or using in a different location.

## Prescribed Fire Can Help Control or Spread Cogongrass

- Cogongrass growth is promoted and will potentially grow faster and thicker if no herbicide is applied after a fire (fire removes thatch and promotes active growth).
- Fire should only be used along with a chemical or tillage accompaniment.
- When the new grass is 12 – 18 inches tall, the first herbicide treatment should be applied.
- [Cogongrass Fires](#) by the Alabama Cooperative Extension

## What Can a Landowner do on Their Own?

- Create an eradication strategy. This generally includes a chemical regime starting with imazapyr (where appropriate) or glyphosate.
- Cogongrass should be sprayed twice a year for 2 – 3 years or until complete control is achieved.
  - Ideally the first spray should occur in March – April before flowering.
  - Ideally the second spray should occur between July 15<sup>th</sup> to October 1<sup>st</sup>, or 4 weeks before the first frost.
  - [Average First Frost Dates for Mississippi - \(plantmaps.com\)](#)
- Herbicides can be purchased from a local Co-Op, garden center or store such as Tractor Supply, Lowes, Home Depot or found online.
  - “Amazon” searches for purchasing Imazapyr and Glyphosate in 2023 showed chemicals such as Alligare Imazapyr 4SL (52.6% active ingredient) and Roundup Pro (41% active ingredient).
  - Always read herbicide labels for rates and warnings.
- Landowners can contact local herbicide applicators or vendors in their area to spray for them or provide guidance. Local vendors can be found by searching the internet for a “Forestry Herbicide Applicator” near the property location or contact a local MSU extension office, local Farm Service Agency, local NRCS office or the local Mississippi Forestry Commission office for additional information on herbicide applicators near the property.
- Once an initial herbicide treatment is conducted, be sure to follow-up on known cogongrass spots. Cogongrass is not a one and done treatment.

## Resources

There are many great resources about Cogongrass that already exist on the internet. Several of these sites have photos for identification, management ideas (use of disking, tilling, or prescribed fire) and detailed treatment methods.

- [Cogongrass](#) publication of the Mississippi State University Extension
- [Cogongrass - One of the Top 10 Worst Weeds in the World](#) video by the MS Forestry Commission
- [Cogongrass Control in Pastures](#) blog post by the University of FL IFAS Extension
- [Cograss.org](#)
- [Cogongrass \(Imperata Cylindrica\) Biology, Ecology, and Management in Florida Grazing Lands](#) article by the University of FL IFAS Extension

Table 1: Mississippi Forestry Commission recommended cogongrass herbicide treatments and rates.

Treatment	Herbicide	Formulation	% Active Ingredient	Broadcast Rate	Non-Ionic Surfactant		Spot Treatment Rate		Non-Ionic Surfactant	
					%	oz per gallon	%	oz per gallon	%	oz per gallon
A	Glyphosate	3 lb. ae/gal	41%	5 pints (or 80oz) (or 2.5 quarts)			2%	2.6		
B1	Arsenal AC	4 lb. ae/gal	53%	1.5 pints (or 24 oz)	0.5%	0.65	0.5%	0.6	0.5%	0.6
B2	Arsenal	2 lb. ae/gal	28%	3 pints (or 48oz)	0.5%	0.65	1%	1.2	0.5%	0.6
C1	Glyphosate + Arsenal AC	3 lb. ae/gal Gly. + 4 lb. ae/gal AC	41% Gly. / 53% AC	2 pints (or 32 oz) Gly. + 1.5 pints (or 24 oz) AC			2% Gly. + .5% AC	2.6 Gly. + .6 AC		
C2	Glyphosate + Arsenal	3 lb. ae/gal Gly. + 2 lb. ae/gal Ar.	41% Gly. / 28% Ar.	2 pints (or 32 oz) Gly. + 3 pints (or 48 oz) Ar.			2% Gly. + 1% Ar.	2.6 Gly. + 1.2 Ar.		

- Information in this table is adapted from Dr. John Byrd at the MSU Department of Plant and Soil Sciences in 2023.
- Most glyphosate products have a surfactant in the mix – if not add .25% - .5% non-ionic surfactant.
- Arsenal and Arsenal AC contain the active ingredient imazapyr at different rates.
- The only reason to mix glyphosate with the imazapyr products is to visually see where the spray is taking effect sooner (days rather than weeks). There is no increased cogongrass control by mixing both herbicides.