# MANAGING WEEDS IN MISSISSIPPI SOYBEAN WITHOUT DICAMBA

Jason Bond, Trent Irby, and Brian Pieralisi

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**See additional information on reverse side.**

## CONVENTIONAL

**PREPLANT[1,2]**

Paraquat +
Group 14 herbicide[3] +
Group 15 herbicide[4]

**PREEMERGENCE[2,5]**

Paraquat +
metribuzin +
Group 15 herbicide[4]

**POSTEMERGENCE[6,7]**

Cobra, fomesafen, or Ultra Blazer
+
Group 15 herbicide[4]

**POSTEMERGENCE AS NEEDED[7,8]**

Cobra or Ultra Blazer

## ENLIST

**PREPLANT[1,2]**

Paraquat +
Group 14 herbicide[3] +
Group 15 herbicide[4]

**PREEMERGENCE[2,5]**

Paraquat +
metribuzin +
Group 15 herbicide[4]

**POSTEMERGENCE[6,7]**

(Enlist One + glufosinate) or Enlist Duo
+
Group 15 herbicide[4]

**POSTEMERGENCE AS NEEDED[7,8]**

(Enlist One + glufosinate) or Enlist Duo

## ENLIST, LIBERTYLINK GT27, OR ROUNDUP READY 2 XTENDFLEX

**PREPLANT[1,2]**

Paraquat +
Group 14 herbicide[3] +
Group 15 herbicide[4]

**PREEMERGENCE[2,5]**

Paraquat +
Metribuzin +
Group 15 herbicide[4]

**POSTEMERGENCE[6,7]**

Glufosinate or glyphosate
+
Fomesafen +
Group 15 herbicide[4]

**POSTEMERGENCE AS NEEDED[7,8]**

Glufosinate or glyphosate
+
Cobra or Ultra Blazer

## ENLIST, LIBERTYLINK GT27, ROUNDUP READY 2, XTEND, OR XTENDFLEX

**PREPLANT[1,2]**

Paraquat +
Group 14 herbicide[3] +
Group 15 herbicide[4]

**PREEMERGENCE[2,5]**

Paraquat +
Metribuzin +
Group 15 herbicide[4]

**POSTEMERGENCE[6,7]**

Glyphosate +
Fomesafen
+
Group 15 herbicide[4]

**POSTEMERGENCE AS NEEDED[7,8]**

Glyphosate
+
Cobra or Ultra Blazer

MISSISSIPPI STATE UNIVERSITY™ EXTENSION

**For more information, contact**
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1. **Preplant applications should be made 14 to 21 days prior to planting and after final bed preparation in fields with targeted soybean planting date later than April 15. A preemergence application should be made before crop emergence.** Control with residual herbicides will be compromised if beds are disturbed after application.
2. The use of full labeled rates of residual herbicides is imperative for herbicide-resistant weed management. Residual herbicides require incorporation from rainfall or irrigation, and level of control and length of residual will vary with rainfall totals. When properly incorporated, residual herbicides can control weeds for 2 to 3 weeks depending on time of year, soil moisture, and weed pressure.
3. Residual herbicides in Group 14 are protoporphyrinogen oxidase inhibitors (PPOs). Group 14 herbicides recommended for use in Mississippi soybean contain flumioxazin (Panther, Valor, Varsity, etc.), fomesafen (Flexstar, Reflex, etc.), Sharpen, or sulfentrazone (Authority products, Spartan Charge, Zone Defense). See flumioxazin label for restrictions on mixing with metolachlor/*S*-metolachlor or Outlook. Herbicide labels should be consulted for seasonal maximum use rates and rotation intervals to other crops.
4. Herbicides in Group 15 are very long chain fatty acid synthesis inhibitors (VLCFAs). Group 15 herbicides recommended for use in Mississippi soybean contain metolachlor/*S*-metolachlor, Outlook, pyroxasulfone (Anthem Maxx, Perpetuo, Zidua), and Warrant (postemergence applications only due to environmental sensitivity). Herbicide labels should be consulted for seasonal maximum use rates and rotation intervals to other crops.
5. **For all targeted soybean planting dates, preemergence applications should be made before soybean emergence up to 7 days prior to planting.** Some soybean varieties are susceptible to injury from metribuzin. Manufacturer information should be consulted during variety selection for level of metribuzin tolerance.
6. **The postemergence application should be made from 7 to 21 days after soybean planting with precise timing dictated by efficacy of preplant and/or preemergence treatments, soybean growth rate, and environmental conditions.** Earlier applications should be utilized if previous treatments were not incorporated or when temperatures are warm and soybean and/or existing weeds are growing rapidly.
7. Spray coverage is critical for weed control with contact herbicides such as Cobra, fomesafen, Ultra Blazer, and glufosinate. Nozzles producing coarse droplets should not be used for contact herbicides. However, Enlist Duo and Enlist One have specific nozzle requirements. Manufacturer information should be consulted for appropriate nozzles for applications containing these products.
8. Salvage treatment should target escaped Palmer amaranth not controlled by earlier applications.

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