MANAGING WEEDS IN MISSISSIPPI SOYBEAN WITHOUT DICAMBA

Jason Bond, Trent Irby, and Brian Pieralisi



Reference to commercial products or trade names within information provided by the Mississippi State University Extension Service and the Mississippi Agricultural and Forestry Experiment Station does not constitute an endorsement by the MSU Extension Service and the Mississippi Agricultural and Forestry Experiment Station and does not imply discrimination against other similar products.

See additional information on reverse side.

CONVENTIONAL

PREPLANT^{1,2}

Paraquat + Group 14 herbicide³ + Group 15 herbicide⁴

PREEMERGENCE^{2,5}

Paraquat + metribuzin + Group 15 herbicide⁴

POSTEMERGENCE^{6,7}

Cobra, fomesafen, or Ultra Blazer

Group 15 herbicide4

POSTEMERGENCE AS NEEDED^{7,8}

Cobra or Ultra Blazer

ENLIST

PREPLANT^{1,2}

Paraquat + Group 14 herbicide³ + Group 15 herbicide⁴

PREEMERGENCE^{2,5}

Paraquat + metribuzin + Group 15 herbicide⁴

POSTEMERGENCE^{6,7}

(Enlist One + glufosinate) or Enlist Duo +

Group 15 herbicide4

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 herbicide³ + Group 15 herbicide⁴

PREEMERGENCE^{2,5}

Paraquat +
Metribuzin +
Group 15 herbicide⁴

POSTEMERGENCE^{6,7}

Glufosinate or glyphosate + Fomesafen + Group 15 herbicide⁴

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 herbicide³ + Group 15 herbicide⁴

PREEMERGENCE^{2,5}

Paraquat + Metribuzin + Group 15 herbicide⁴

POSTEMERGENCE^{6,7}

Glyphosate + Fomesafen

+

Group 15 herbicide4

POSTEMERGENCE AS NEEDED^{7,8}

Glyphosate

Cobra or Ultra Blazer

MANAGING WEEDS IN MISSISSIPPI SOYBEAN WITHOUT DICAMBA

Jason Bond, Trent Irby, and Brian Pieralisi

- 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.



Publication 3984 (03-24)

Copyright 2024 by Mississippi State University. All rights reserved. This publication may be copied and distributed without alteration for nonprofit educational purposes provided that credit is given to the Mississippi State University Extension Service.

Mississippi State University is an equal opportunity institution. Discrimination in university employment, programs, or activities based on race, color, ethnicity, sex, pregnancy, religion, national origin, disability, age, sexual orientation, gender identity, genetic information, status as a U.S. veteran, or any other status protected by applicable law is prohibited.

Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. ANGUS L. CATCHOT JR., Director