

Integrated weed management tactics

NON GLYPHOSATE WEED TACTICS FOR THE COTTON FARMING SYSTEM

An integrated weed management system relies on a large number of interrelated, complementary components including both chemical and non-chemical tactics as well as cultural practices such as rotation, crop competition, farm hygiene, and crop scouting.



2 non-glyphosate tactics in fallow + 2 non-glyphosate tactics in crop & NO SURVIVORS

NON-GLYPHOSATE TACTICS

Fallow

Strategic cultivation
Double knock
Optical sprayers
Patch management
Cover crops

Non Glyphosate options²

Group C/5 (bromoxynil, terbutylazine)
Group G / 14 (flumioxazin, pyraflufen, saflufenacil)
Group H/27 (isoxaflutole)
Group L/22 (paraquat, paraquat/diquat)
Group L-22/Q-34 (amitrole/paraquat)
Group N/10 (glufosinate)
Group I/4 (2,4-D, dicamba, fluroxypyr)

Rotation Crops⁴

Crop competition
Rotate MoA
Plant back restrictions
Cover crops

Pre/at plant

Cultivation

Knockdown MoA

Group C/5 (bromoxynil)
Group D/3 (chlorthal dimethyl)
Group G/14 (pyraflufen, flumioxazin, saflufenacil, oxyfluorfen, carfentrazone)
Group I/4 (dicamba, fluroxypyr)
Group L/22 (paraquat, paraquat/diquat)
Group L-22/Q-34 (amitrole/paraquat)
Group N / 10 (glufosinate)

Residual MoA⁴

Group C/5 (fluometuron, prometryn, terbutylazine, diuron)
Group D/3 (pendimethalin, trifluralin)
Group K/15 (S-metolachlor, metolachlor)

Post-emergent¹

In-crop cultivation
Manual chipping
Rogueing

Post-emergent OTT MoA

Group A/1³ (sethoxydim, clethodim, butoxydim, propaquizafop, haloxyfop)
Group K/15 (S-metolachlor⁵)
Group Z/0 (MSMA)

Lay-by, directed or shielded spray

Group C/5 (fluometuron, prometryn, terbutylazine, diuron)
Group D/3 (pendimethalin)
Group G/14 (flumioxazin⁵)
Group K/15 (S-metolachlor)
Group J/0 (2,2-DPA)

Maturing crops

Aim for 100% control of survivors
Cultivation, chipping or spot spraying

Comments

Survivors **MUST** be controlled by another tactic prior to seed set.
Read and follow label directions.
Rotate herbicide Mode of Action (MoA).
Come Clean. Go Clean. to stop weed seeds.
Scout fields for weed survivors.
Keep accurate field records.
Ensure effective volunteer/ratoon management.
DO NOT rely on glyphosate to control weeds in non-field areas.
Take a farming systems approach to weed management, including winter, summer and non-field areas.

¹ Mix full rates of different MoA, and rotate to alternative MoA in following years.

² APVMA permits: 12941, 88120 for fallow use.

³ Group A/1 herbicides already exhibit widespread resistance in several species. Controlling survivors is essential.

⁴ Refer to label for plant-back restrictions to following crop.

⁵ Limited formulations are registered for this use. Please check label.

NO SURVIVORS

Survivors – aim for 100% control

In fallow survivor control

Cultivation, chipping or spot spraying
Refer above for NON glyphosate options
Optical sprayer

Pre-plant survivor control

Cultivation, chipping or spot spraying
flumioxazin
pyraflufen-ethyl
carfentrazone-ethyl
bromoxynil

Post-emergent

Inter-row cultivation, chipping or spot spraying

Post-harvest

Root cutting for crop destruction
Cultivation, chipping or spot spraying
carfentrazone-ethyl
pyraflufen-ethyl
bromoxynil
fluroxypyr



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